WEST Search History

DATE: Tuesday, October 28, 2003

Set Name side by side	Query	Hit Count	Set Name result set
DB=USPT,PGPB,JPAB,EPAB,DWPI,TDBD; PLUR=YES; OP=ADJ			
L15	L14 and amino acid sequence	231	L15
L14	L13 and vaccine	241	L14
L13	L12 and immunogenic fragment	242	L13
L12	L11 and fusion	951	L12
L11	l9 and pneumoniae	1776	L11
L10	L9 and C. pneumoniae	0	L10
L9	chlamydia$ and (antigen or dna or protein or antibody or diagnosis or kit)	4541	L9
L8	L7 and chlamydia	8	L8
L7	l1 or l2	29	L7
DB=USPT; PLUR=YES; OP=ADJ			
L6	L5 and chlamydia	8	L6
L5	l1 or l2	29	L5
L4	wang-joe.in.	0	L4
L3	wang-joe.in.	0	L3
L2	oomen-raymond-p.in.	24	L2
L1	murdin-andrew-d.in.	9	L1

END OF SEARCH HISTORY

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   FILE 'BIOSIS, MEDLINE, AGRICOLA, EMBASE, CABA, WPIDS, JAPIO, BIOTECHDS,
     LIFESCI, CAPLUS' ENTERED AT 16:37:16 ON 28 OCT 2003
                 E MURDIN ANDREW D/AU
L1            100 S E1-E4
                 E OOMEN RAYMOND P/AU
L2             88 S E1-E4
                 E WANG JOE/AU
L3             37 S E3-E5
L4            149 S L1-L3
L5             70 S L4 AND CHLAMYDIA?
L6             59 S L5 AND VACCIN?
L7             54 DUP REM L6 (5 DUPLICATES REMOVED)
L8              3 S L7 AND (DNA VACCIN? OR NUCLEIC ACID VACCIN?)
L9           9649 S CHLAMYDIA PNEUMONIAE
L10           481 S L9 AND VACCIN?
L11            65 S L10 AND (DNA VACCIN? OR NUCLEIC ACID VACCIN?)
L12            55 DUP REM L11 (10 DUPLICATES REMOVED)
L13           334 S L10 AND (ANTIGEN OR PROTEIN OR PEPTIDE)
L14            38 S L13 AND IMMUNOGENIC FRAGMENT
L15            26 DUP REM L14 (12 DUPLICATES REMOVED)
L16           275 S L10 AND (DIAGNOSIS OR DETECT? OR ASSAY)
L17            72 S L16 AND (FUSION PROTEIN OR HETEROLOGOUS POLYPEPTIDE)
L18            40 DUP REM L17 (32 DUPLICATES REMOVED)
L19           250 S L10 AND ANTIBOD?
L20           126 DUP REM L19 (124 DUPLICATES REMOVED)
L21            51 S L20 AND (PRIMER OR PRIMERS OR PROBE OR PROBES)
L22            50 S L21 AND (DIAGNOSIS OR DETECT? OR ASSAY)

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9/857128

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NEWS	14	OCT 21	BIOSIS file reloaded and enhanced
NEWS	15	OCT 28	BIOSIS file segment of TOXCENTER reloaded and enhanced

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FILE 'HOME' ENTERED AT 16:36:59 ON 28 OCT 2003

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	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

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FILE 'MEDLINE' ENTERED AT 16:37:16 ON 28 OCT 2003

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=> e murdin andrew d/au
E1            1     MURDIN A D */AU
E2           19     MURDIN ANDREW/AU
E3           74 --> MURDIN ANDREW D/AU
E4            6     MURDIN ANDREW DAVID/AU
E5            7     MURDIN B/AU
E6           75     MURDIN B N/AU
E7            2     MURDIN BEN/AU
E8            1     MURDIN BEN N/AU
E9            1     MURDIN D/AU
E10           2     MURDIN GERETTI A/AU
E11           1     MURDIN GERETTI A M/AU
E12           1     MURDIN GERETTI ANNAMARIE/AU

=> s e1-e4
L1          100 ("MURDIN A D *"/AU OR "MURDIN ANDREW"/AU OR "MURDIN ANDREW D"/AU
                 OR "MURDIN ANDREW DAVID"/AU)

=> e oomen raymond p/au
E1            6     OOMEN RAY/AU
E2            3     OOMEN RAYMOND/AU
E3           73 --> OOMEN RAYMOND P/AU
E4            6     OOMEN RAYMOND PETER/AU
E5            4     OOMEN RONALD/AU
E6            9     OOMEN RONALD J F J/AU
E7            1     OOMEN RUIJTEN R/AU
E8            1     OOMEN S/AU
E9            6     OOMEN S P/AU
E10          13     OOMEN S P M A/AU
E11          11     OOMEN SIGRID P M A/AU
E12           1     OOMEN SPMA/AU

=> s e1-e4
L2           88 ("OOMEN RAY"/AU OR "OOMEN RAYMOND"/AU OR "OOMEN RAYMOND P"/AU
                OR "OOMEN RAYMOND PETER"/AU)
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was observed in mice given combinational **vaccination** compared with mice given MOMP ISCOM immunization alone, and the protection approximated that induced by live organisms. Enhanced protection was correlated with stronger delayed-type hypersensitivity, higher levels of gamma interferon production, and increased immunoglobulin A antibody responses in lung homogenates. The results indicate that DNA priming followed by ISCOM protein boosting may be useful in designing a fully protective **chlamydial vaccine**.

L8 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2003 ACS on STN
AN 2001:472751 CAPLUS
DN 135:75736
TI **Chlamydia** membrane ATPase and corresponding DNA fragments and uses thereof
IN **Murdin, Andrew D.**; **Oomen, Raymond P.**; **Wang, Joe**; Dunn, Pamela
PA Aventis Pasteur Limited, Can.
SO PCT Int. Appl., 80 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2001046226	A2	20010628	WO 2000-CA1536	20001220
WO 2001046226	A3	20020418		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRAI US 1999-171538P P 19991222
AB The present invention provides a method of nucleic acid, including DNA, immunization of a host, including humans, against disease caused by infection by a strain of **Chlamydia**, specifically C. pneumoniae, employing a vector contg. a nucleotide sequence encoding a membrane ATPase of a strain of **Chlamydia** pneumoniae and a promoter to effect expression of the membrane ATPase in the host. Modifications are possible within the scope of this invention.

L8 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2003 ACS on STN
AN 2001:380619 CAPLUS
DN 135:4464
TI **DNA vaccine** against **Chlamydia** pneumoniae
IN **Murdin, Andrew D.**; **Oomen, Raymond P.**; **Wang, Joe**; Dunn, Pamela
PA Aventis Pasteur Limited, Can.
SO PCT Int. Appl., 80 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2001036457	A2	20010525	WO 2000-CA1346	20001110
WO 2001036457	A3	20011101		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,

LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
PRAI US 1999-165615P P 19991115
AB The authors disclose an amino acid transporter of **Chlamydia** pneumoniae, which on genetic immunization of mice, provides a protective immune response.

=> d 17 bib ab 1-
YOU HAVE REQUESTED DATA FROM 54 ANSWERS - CONTINUE? Y/(N):y

L7 ANSWER 1 OF 54 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
AN 2003:435154 BIOSIS
DN PREV200300435154
TI **Chlamydia** antigens and corresponding DNA fragments and uses thereof.
AU **Murdin, Andrew D.** [Inventor, Reprint Author]; **Oomen, Raymond P.** [Inventor]; Dunn, Pamela L. [Inventor]
CS Ontario, Canada
ASSIGNEE: Aventis Pasteur Limited/Aventis Pasteur Limitee, Toronto, Canada
PI US 6607730 August 19, 2003
SO Official Gazette of the United States Patent and Trademark Office Patents, (Aug. 19, 2003) Vol. 1273, No. 3. http://www.uspto.gov/web/menu/patdata.html. e-file.
ISSN: 0098-1133 (ISSN print).
DT Patent
LA English
ED Entered STN: 17 Sep 2003
Last Updated on STN: 17 Sep 2003
AB In summary of this disclosure, the present invention provides a method of nucleic acid, including DNA, immunization of a host, including humans, against disease caused by infection by a strain of **Chlamydia**, specifically C. pneumoniae, employing a vector, containing a nucleotide sequence encoding an POMP91B precursor protein of a strain of **Chlamydia** pneumoniae and a promoter to effect expression of the POMP91B precursor gene in the host. Modifications are possible within the scope of this invention.

L7 ANSWER 2 OF 54 CAPLUS COPYRIGHT 2003 ACS on STN
AN 2003:829363 CAPLUS
TI **Chlamydial vaccines** and immunogenic compositions containing an outer membrane antigen and methods of preparation thereof
IN **Murdin, Andrew D.**; Underdown, Brian J.
PA Aventis Pasteur Limited, Can.
SO U.S., 20 pp., Cont.-in-part of U.S. Ser. No. 713,236.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6635746	B1	20031021	US 1999-254450	19990528
	US 6464979	B1	20021015	US 1996-713236	19960912
	WO 9810789	A1	19980319	WO 1997-CA656	19970911

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW

RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG

PRAI US 1996-713236 A2 19960912
WO 1997-CA656 W 19970911

AB Immunogenic compns. including **vaccines** are described that comprise an outer membrane antigen ext. of a strain of **Chlamydia** and are effective in protection against disease caused by **Chlamydia** infection The immunogenic compns. may comprise the major outer membrane protein (MOMP) of **Chlamydia** which may be in a homooligomeric form or complexed with at least one other antigen of **Chlamydia**. The immunogenic compn. may include an immunostimulating complex (ISCOM) and the outer membrane antigen may be incorporated therein. The immunogenic compns. have utility as **chlamydial vaccines** and in diagnostic applications.

L7 ANSWER 3 OF 54 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
AN 2002:620163 BIOSIS
DN PREV200200620163
TI **Chlamydial vaccines** and methods of preparation thereof.
AU **Murdin, Andrew D.** [Inventor, Reprint author]; Underdown, Brian J. [Inventor]
CS Newmarket, Canada
ASSIGNEE: Aventis Pasteur Limited, Toronto, Canada
PI US 6464979 October 15, 2002
SO Official Gazette of the United States Patent and Trademark Office Patents, (Oct. 15, 2002) Vol. 1263, No. 3. http://www.uspto.gov/web/menu/patdata.html. e-file.
CODEN: OGUPE7. ISSN: 0098-1133.
DT Patent
LA English
ED Entered STN: 4 Dec 2002
Last Updated on STN: 4 Dec 2002
AB Immunogenic compositions including **vaccines** are described that comprise an outer membrane antigen extract of a strain of **Chlamydia** and are effective in protection against disease caused by **Chlamydia** infection. The immunogenic compositions may comprise the major outer membrane protein (MOMP) of **Chlamydia** which may be in a homooligomeric form or complexed with at least one other antigen of **Chlamydia**. The immunogenic composition may include an immunostimulating complex (ISCOM) and the outer membrane antigen may be incorporated therein. The immunogenic compositions have utility as **chlamydial vaccines** and in diagnostic applications.

L7 ANSWER 4 OF 54 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
AN 2002:389247 BIOSIS
DN PREV200200389247
TI **Chlamydia** antigens and corresponding DNA fragments and uses thereof.
AU **Murdin, Andrew D.** [Inventor, Reprint author]; **Oomen, Raymond P.** [Inventor]; Dunn, Pamela L. [Inventor]
CS Ontario, Canada
ASSIGNEE: Connaught Laboratories Limited, Ontario, Canada
PI US 6403101 June 11, 2002
SO Official Gazette of the United States Patent and Trademark Office Patents, (June 11, 2002) Vol. 1259, No. 2. http://www.uspto.gov/web/menu/patdata.html. e-file.
CODEN: OGUPE7. ISSN: 0098-1133.
DT Patent
LA English
ED Entered STN: 17 Jul 2002
Last Updated on STN: 17 Jul 2002

AB In summary of this disclosure, the present invention provides a method of nucleic acid, including DNA, immunization of a host, including humans, against disease caused by infection by a strain of **Chlamydia**, specifically C. pneumoniae, employing a vector, containing a nucleotide sequence encoding a lorf2 protein of a strain of **Chlamydia** pneumoniae and a promoter to effect expression of the lorf2 gene in the host. Modifications are possible within the scope of this invention.

L7 ANSWER 5 OF 54 CAPLUS COPYRIGHT 2003 ACS on STN
AN 2001:833541 CAPLUS
DN 135:367765
TI **Chlamydia** antigens and corresponding DNA fragments and their uses for DNA or immunogen **vaccination** against **Chlamydia** infection
IN **Murdin, Andrew D.**; **Oomen, Raymond P.**; **Wang, Joe**; Dunn, Pamela
PA Aventis Pasteur Limited, Can.
SO PCT Int. Appl., 355 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001085972	A2	20011115	WO 2001-CA653	20010508
	WO 2001085972	A3	20020808		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	EP 1282718	A2	20030212	EP 2001-931274	20010508
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
PRAI	US 2000-202672P	P	20000508		
	US 2000-207852P	P	20000530		
	US 2000-211796P	P	20000616		
	US 2000-211797P	P	20000616		
	US 2000-211798P	P	20000616		
	US 2000-211801P	P	20000616		
	US 2000-212044P	P	20000616		
	US 2000-235335P	P	20000926		
	US 2000-235361P	P	20000926		
	US 2000-235398P	P	20000926		
	WO 2001-CA653	W	20010508		

AB The present invention provides ten nucleic acids, their encoded proteins, and vectors for a method of nucleic acid, including DNA, immunization of a host, including humans, against disease caused by infection by a strain of **Chlamydia**, specifically C. pneumoniae. The method employs a vector contg. a nucleotide sequence encoding a polypeptide of a strain of **Chlamydia** pneumoniae operably linked to a promoter to effect expression of the gene product in the host. The polypeptides are derived from C. pneumoniae and are selected from an ATP-binding cassette protein, a secretory locus ORF, an endopeptidase, a protease, a metalloprotease, CLP protease ATPase, a CLP protease subunit, a transglycosylase/transpeptidase, a CLPc protease, and thioredoxin. Modifications are possible within the scope of this invention.

L7 ANSWER 6 OF 54 CAPLUS COPYRIGHT 2003 ACS on STN

AN 2001:748010 CAPLUS
DN 135:268380
TI **Chlamydia** pneumoniae immunogenic transmembrane protein and its gene sequence and use for immunization against **Chlamydia** infection
IN **Murdin, Andrew D.; Oomen, Raymond P.; Wang, Joe**; Dunn, Pamela
PA Aventis Pasteur Limited, Can.
SO PCT Int. Appl., 90 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001075114	A2	20011011	WO 2001-CA462	20010404
	WO 2001075114	A3	20020801		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

	US 2002082402	A1	20020627	US 2001-824588	20010403
PRAI	US 2000-194477P	P	20000404		

AB The present invention provides nucleic acids, proteins and vectors for a method of nucleic acid, including DNA, immunization of a host, including humans, against disease caused by infection by a strain of **Chlamydia**, specifically C. pneumoniae. The transmembrane protein gene is amplified from C. pneumonia strain CWL029 by PCR and cloned into the pCA-Myc-His eukaryotic expression vector with transcription under control of the human cytomegalovirus promoter. The method employs a plasmid vector contg. a nucleotide sequence encoding a transmembrane protein of a strain of **Chlamydia** pneumoniae and a promoter to effect expression of the transmembrane protein gene product in the host. DNA immunization of mice with the plasmid vector achieves protection against an intranasal challenge of C. pneumoniae.

L7 ANSWER 7 OF 54 CAPLUS COPYRIGHT 2003 ACS on STN
AN 2001:748009 CAPLUS
DN 135:284102
TI **Chlamydia** pneumoniae immunogenic myosin heavy chain homolog and its gene sequence and use for immunization against **Chlamydia** infection
IN **Murdin, Andrew D.; Oomen, Raymond P.; Wang, Joe**; Dunn, Pamela
PA Aventis Pasteur Limited, Can.
SO PCT Int. Appl., 83 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001075113	A2	20011011	WO 2001-CA461	20010404
	WO 2001075113	A3	20020801		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO,

RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

US 2002132994 A1 20020919 US 2001-824568 20010403

PRAI US 2000-194475P P 20000404

AB The present invention provides nucleic acids, proteins and vectors for a method of nucleic acid, including DNA, immunization of a host, including humans, against disease caused by infection by a strain of **Chlamydia**, specifically C. pneumoniae. The myosin heavy chain homolog gene is amplified from C. pneumonia strain CWLO29 by PCR and cloned into the pCA-Myc-His eukaryotic expression vector with transcription under control of the human cytomegalovirus promoter. The method employs a plasmid vector contg. a nucleotide sequence encoding a myosin heavy chain homolog of a strain of **Chlamydia** pneumoniae and a promoter to effect expression of the myosin heavy chain homolog gene product in the host. DNA immunization of mice with the plasmid vector achieves protection against an intranasal challenge of C. pneumoniae.

L7 ANSWER 8 OF 54 CAPLUS COPYRIGHT 2003 ACS on STN

AN 2001:748008 CAPLUS

DN 135:284101

TI **Chlamydia** pneumoniae immunogenic glutamate-binding protein and its gene sequence and use for immunization against **Chlamydia** infection

IN **Murdin, Andrew D.**; **Oomen, Raymond P.**; **Wang, Joe**; Dunn, Pamela

PA Aventis Pasteur Limited, Can.

SO PCT Int. Appl., 86 pp.
CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001075112	A2	20011011	WO 2001-CA460	20010404
WO 2001075112	A3	20020228		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

US 2002094965 A1 20020718 US 2001-824206 20010403

PRAI US 2000-194472P P 20000404

AB The present invention provides nucleic acids, proteins and vectors for a method of nucleic acid, including DNA, immunization of a host, including humans, against disease caused by infection by a strain of **Chlamydia**, specifically C. pneumoniae. The glutamate-binding protein gene is amplified from C. pneumonia strain CWLO29 by PCR and cloned into the pCA-Myc-His eukaryotic expression vector with transcription under control of the human cytomegalovirus promoter. The method employs a plasmid vector contg. a nucleotide sequence encoding a glutamate-binding protein of a strain of **Chlamydia** pneumoniae and a promoter to effect expression of the glutamate-binding protein gene product in the host. DNA immunization of mice with the plasmid vector achieves protection against an intranasal challenge of C. pneumoniae.

L7 ANSWER 9 OF 54 CAPLUS COPYRIGHT 2003 ACS on STN

AN 2001:748007 CAPLUS
DN 135:268379
TI **Chlamydia** pneumoniae immunogenic myosin heavy chain and its gene sequence and use for immunization against **Chlamydia** infection
IN **Murdin, Andrew D.**; **Oomen, Raymond P.**; **Wang, Joe**; Dunn, Pamela
PA Aventis Pasteur Limited, Can.
SO PCT Int. Appl., 83 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2001075111	A2	20011011	WO 2001-CA456	20010404
WO 2001075111	A3	20020124		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

US 2003100706	A1	20030529	US 2001-824584	20010403
PRAI US 2000-194471P	P	20000404		

AB The present invention provides nucleic acids, proteins and vectors for a method of nucleic acid, including DNA, immunization of a host, including humans, against disease caused by infection by a strain of **Chlamydia**, specifically C. pneumoniae. The myosin heavy chain gene is amplified from C. pneumonia strain CWLO29 by PCR and cloned into the pCA-Myc-His eukaryotic expression vector with transcription under control of the human cytomegalovirus promoter. The method employs a plasmid vector contg. a nucleotide sequence encoding a myosin heavy chain of a strain of **Chlamydia** pneumoniae and a promoter to effect expression of the myosin heavy chain gene product in the host. DNA immunization of mice with the plasmid vector achieves protection against an intranasal challenge of C. pneumoniae.

L7 ANSWER 10 OF 54 CAPLUS COPYRIGHT 2003 ACS on STN
AN 2001:747834 CAPLUS
DN 135:302896
TI **Chlamydia** antigens and corresponding DNA fragments and uses thereof
IN **Murdin, Andrew D.**; **Oomen, Raymond P.**; **Wang, Joe**; Dunn, Pamela
PA Aventis Pasteur Limited, Can.
SO PCT Int. Appl., 88 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2001074863	A2	20011011	WO 2001-CA455	20010404
WO 2001074863	A3	20020801		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

US 2002071831 A1 20020613 US 2001-824567 20010403

PRAI US 2000-194464P P 20000404

AB The present invention provides nucleic acids, proteins and vectors for a method of nucleic acid, including DNA, immunization of a host, including humans, against disease caused by infection by a strain of **Chlamydia**, specifically C. pneumoniae. The method employs a vector contg. a nucleotide sequence encoding an ATP-binding cassette of a strain of **Chlamydia** pneumoniae and a promoter to effect expression of the ATP-binding cassette gene product in the host. Modifications are possible within the scope of this invention.

L7 ANSWER 11 OF 54 CAPLUS COPYRIGHT 2003 ACS on STN

AN 2001:472751 CAPLUS

DN 135:75736

TI **Chlamydia** membrane ATPase and corresponding DNA fragments and uses thereof

IN **Murdin, Andrew D.**; **Oomen, Raymond P.**; **Wang, Joe**; Dunn, Pamela

PA Aventis Pasteur Limited, Can.

SO PCT Int. Appl., 80 pp.
CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2001046226	A2	20010628	WO 2000-CA1536	20001220
WO 2001046226	A3	20020418		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRAI US 1999-171538P P 19991222

AB The present invention provides a method of nucleic acid, including DNA, immunization of a host, including humans, against disease caused by infection by a strain of **Chlamydia**, specifically C. pneumoniae, employing a vector contg. a nucleotide sequence encoding a membrane ATPase of a strain of **Chlamydia** pneumoniae and a promoter to effect expression of the membrane ATPase in the host. Modifications are possible within the scope of this invention.

L7 ANSWER 12 OF 54 CAPLUS COPYRIGHT 2003 ACS on STN

AN 2001:472750 CAPLUS

DN 135:75735

TI **Chlamydia** outer membrane protein and corresponding DNA fragments and uses thereof

IN **Murdin, Andrew D.**; **Oomen, Raymond P.**; **Wang, Joe**; Dunn, Pamela

PA Aventis Pasteur Ltd., Can.

SO PCT Int. Appl., 74 pp.
CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

PI	WO 2001046225	A2	20010628	WO 2000-CA1535	20001220
	WO 2001046225	A3	20011206		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	US 2002099188	A1	20020725	US 2000-741849	20001222
PRAI	US 1999-171539P	P	19991222		

AB The present invention provides a method of nucleic acid, including DNA, immunization of a host, including humans, against disease caused by infection by a strain of **Chlamydia**, specifically C. pneumoniae, employing a vector contg. a nucleotide sequence encoding an outer membrane protein of a strain of **Chlamydia** pneumoniae and a promoter to effect expression of the outer membrane protein in the host. Modifications are possible within the scope of this invention.

L7 ANSWER 13 OF 54 CAPLUS COPYRIGHT 2003 ACS on STN
AN 2001:472749 CAPLUS
DN 135:75734
TI **Chlamydia** omp P6 precursor protein and corresponding DNA fragments and uses thereof
IN **Murdin, Andrew D.; Oomen, Raymond P.; Wang, Joe**; Dunn, Pamela
PA Aventis Pasteur Limited, Can.
SO PCT Int. Appl., 74 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001046224	A2	20010628	WO 2000-CA1534	20001220
	WO 2001046224	A3	20011206		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	EP 1240331	A2	20020918	EP 2000-984741	20001220
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	JP 2003517844	T2	20030603	JP 2001-547133	20001220
	US 2002123067	A1	20020905	US 2000-747348	20001222
	US 2003161833	A1	20030828	US 2002-334137	20021231
PRAI	US 1999-171525P	P	19991222		
	WO 2000-CA1534	W	20001220		
	US 2000-747348	A1	20001222		

AB The present invention provides a method of nucleic acid, including DNA, immunization of a host, including humans, against disease caused by infection by a strain of **Chlamydia**, specifically C. pneumoniae, employing a vector contg. a nucleotide sequence encoding an omp P6 precursor of a strain of **Chlamydia** pneumoniae and a promoter to effect expression of the omp P6 precursor in the host. Modifications are

possible within the scope of this invention.

L7 ANSWER 14 OF 54 CAPLUS COPYRIGHT 2003 ACS on STN
AN 2001:380619 CAPLUS
DN 135:4464
TI DNA **vaccine** against **Chlamydia** pneumoniae
IN **Murdin, Andrew D.**; **Oomen, Raymond P.**; **Wang, Joe**; Dunn, Pamela
PA Aventis Pasteur Limited, Can.
SO PCT Int. Appl., 80 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2001036457	A2	20010525	WO 2000-CA1346	20001110
WO 2001036457	A3	20011101		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRAI US 1999-165615P P 19991115
AB The authors disclose an amino acid transporter of **Chlamydia** pneumoniae, which on genetic immunization of mice, provides a protective immune response.

L7 ANSWER 15 OF 54 CAPLUS COPYRIGHT 2003 ACS on STN
AN 2001:380618 CAPLUS
DN 135:4463
TI **Chlamydia** antigens and corresponding DNA fragments and uses thereof
IN **Murdin, Andrew D.**; **Oomen, Raymond P.**; **Wang, Joe**; Dunn, Pamela
PA Aventis Pasteur Ltd., Can.
SO PCT Int. Appl., 76 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2001036456	A2	20010525	WO 2000-CA1345	20001110
WO 2001036456	A3	20011004		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRAI US 1999-164918P P 19991115
AB The present invention provides a method of nucleic acid, including DNA, immunization of a host, including humans, against disease caused by infection by a strain of **Chlamydia**, specifically C. pneumoniae, employing a vector contg. a nucleotide sequence encoding an OppB gene

product of a strain of **Chlamydia** pneumoniae and a promoter to effect expression of the OppB gene product in the host. Modifications are possible within the scope of this invention.

L7 ANSWER 16 OF 54 CAPLUS COPYRIGHT 2003 ACS on STN
AN 2001:380617 CAPLUS
DN 135:18543
TI **Chlamydia** antigens and corresponding DNA fragments and uses thereof
IN **Murdin, Andrew D.**; **Oomen, Raymond P.**; **Wang, Joe**; Dunn, Pamela
PA Aventis Pasteur Limited, Can.
SO PCT Int. Appl., 83 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2001036455	A2	20010525	WO 2000-CA1344	20001110
WO 2001036455	A3	20011018		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 2003157123	A1	20030821	US 2002-320713	20021217
PRAI US 1999-164823P	P	19991112		
US 2000-709384	A1	20001113		

AB The present invention provides a method of nucleic acid, including DNA, immunization of a host, including humans, against disease caused by infection by a strain of **Chlamydia**, specifically C. pneumoniae, employing a vector contg. a nucleotide sequence encoding a membrane ATPase of a strain of **Chlamydia** pneumoniae and a promoter to effect expression of the membrane ATPase in the host. Modifications are possible within the scope of this invention.

L7 ANSWER 17 OF 54 CAPLUS COPYRIGHT 2003 ACS on STN
AN 2001:229054 CAPLUS
DN 134:251202
TI Sequences of **Chlamydia** pneumoniae antigen lpxB, and their diagnostic and therapeutic uses
IN **Murdin, Andrew D.**; **Oomen, Raymond P.**; **Wang, Joe**; Dunn, Pamela
PA Aventis Pasteur Limited, Can.
SO PCT Int. Appl., 80 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2001021810	A1	20010329	WO 2000-CA1085	20000915
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRAI US 1999-154461P P 19990917

AB The invention provides protein and DNA sequences of full-length antigen lpxB of **Chlamydia** pneumoniae. The present invention also relates to immunization of a host, including humans, against disease caused by infection by a strain of **Chlamydia**, specifically C. pneumoniae, employing a vector contg. a **Chlamydia** protein gene and a promoter to effect expression of the antigen lpxB gene in the host.

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 18 OF 54 CAPLUS COPYRIGHT 2003 ACS on STN
AN 2001:229051 CAPLUS
DN 134:248624
TI Sequences of **Chlamydia** pneumoniae hypothetical apoptosis inhibitor and their diagnostic and therapeutic uses
IN **Murdin, Andrew D.**; **Oomen, Raymond P.**; **Wang, Joe**; Dunn, Pamela
PA Aventis Pasteur Limited, Can.
SO PCT Int. Appl., 75 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001021806	A1	20010329	WO 2000-CA1090	20000915

PI
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRAI US 1999-154324P P 19990917

AB The invention provides protein and DNA sequences of full-length hypothetical apoptosis inhibitor of **Chlamydia** pneumoniae. The present invention also relates to immunization of a host, including humans, against disease caused by infection by a strain of **Chlamydia**, specifically C. pneumoniae, employing a vector contg. a **Chlamydia** protein gene and a promoter to effect expression of the hypothetical apoptosis inhibitor gene in the host.

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 19 OF 54 CAPLUS COPYRIGHT 2003 ACS on STN
AN 2001:229050 CAPLUS
DN 134:248623
TI Sequences of **Chlamydia** pneumoniae general secretion pathway protein E, and their diagnostic and therapeutic uses
IN **Murdin, Andrew D.**; **Oomen, Raymond P.**; **Wang, Joe**; Dunn, Pamela
PA Aventis Pasteur Limited, Can.
SO PCT Int. Appl., 79 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

PI	WO 2001021805	A1	20010329	WO 2000-CA1089	20000915
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
PRAI	US 1999-154595P	P	19990917		

AB The invention provides protein and DNA sequences of full-length general secretion pathway protein E of **Chlamydia** pneumoniae. The present invention also relates to immunization of a host, including humans, against disease caused by infection by a strain of **Chlamydia**, specifically C. pneumoniae, employing a vector contg. a **Chlamydia** protein gene and a promoter to effect expression of the general secretion pathway protein E gene in the host.

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 20 OF 54 CAPLUS COPYRIGHT 2003 ACS on STN
AN 2001:229049 CAPLUS
DN 134:248622
TI Sequences of **Chlamydia** pneumoniae outer membrane protein OMP, and their diagnostic and therapeutic uses
IN **Murdin, Andrew D.**; **Oomen, Raymond P.**; **Wang, Joe**; Dunn, Pamela
PA Aventis Pasteur Limited, Can.
SO PCT Int. Appl., 82 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PI	WO 2001021804	A1	20010329	WO 2000-CA1088	20000915
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	EP 1220925	A1	20020710	EP 2000-962125	20000915
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
	JP 2003510050	T2	20030318	JP 2001-525362	20000915
PRAI	US 1999-154652P	P	19990920		
	WO 2000-CA1088	W	20000915		

AB The invention provides protein and DNA sequences of full-length outer membrane protein OMP of **Chlamydia** pneumoniae. The present invention also relates to immunization of a host, including humans, against disease caused by infection by a strain of **Chlamydia**, specifically C. pneumoniae, employing a vector contg. a **Chlamydia** protein gene and a promoter to effect expression of the outer membrane protein OMP gene in the host.

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 21 OF 54 CAPLUS COPYRIGHT 2003 ACS on STN
AN 2001:229048 CAPLUS
DN 134:262613
TI Sequences of **Chlamydia** pneumoniae ADP/ATP translocase gene Npt2, and their diagnostic and therapeutic uses
IN **Murdin, Andrew D.**; **Oomen, Raymond P.**; **Wang, Joe**; Dunn, Pamela
PA Aventis Pasteur Limited, Can.
SO PCT Int. Appl., 79 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2001021803	A1	20010329	WO 2000-CA1087	20000915
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1220924	A1	20020710	EP 2000-962124	20000915
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				

PRAI US 1999-154326P P 19990917
WO 2000-CA1087 W 20000915
AB The invention provides protein and DNA sequences of full-length ADP/ATP translocase gene Npt2 of **Chlamydia** pneumoniae. The present invention also relates to immunization of a host, including humans, against disease caused by infection by a strain of **Chlamydia**, specifically C. pneumoniae, employing a vector contg. a **Chlamydia** protein gene and a promoter to effect expression of the ADP/ATP translocase gene Npt2 in the host.
RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 22 OF 54 CAPLUS COPYRIGHT 2003 ACS on STN
AN 2001:229047 CAPLUS
DN 134:251201
TI Sequences of **Chlamydia** pneumoniae antigen lpdA, and their diagnostic and therapeutic uses
IN **Murdin, Andrew D.**; **Oomen, Raymond P.**; **Wang, Joe**; Dunn, Pamela
PA Aventis Pasteur Limited, Can.
SO PCT Int. Appl., 78 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2001021802	A1	20010329	WO 2000-CA1086	20000915
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,				

DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRAI US 1999-154325P P 19990917

AB The invention provides protein and DNA sequences of full-length antigen lpdA of **Chlamydia** pneumoniae. The present invention also relates to immunization of a host, including humans, against disease caused by infection by a strain of **Chlamydia**, specifically C. pneumoniae, employing a vector contg. a **Chlamydia** protein gene and a promoter to effect expression of the antigen lpdA gene in the host.

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 23 OF 54 CAPLUS COPYRIGHT 2003 ACS on STN
AN 2001:31651 CAPLUS
DN 134:99571
TI **Chlamydia** antigen orfF and corresponding DNA sequences and uses for diagnosis, preventing, and treatment of **Chlamydia** infection
IN **Murdin, Andrew D.**; **Oomen, Raymond P.**; **Wang, Joe**; Dunn, Pamela
PA Aventis Pasteur Limited, Can.
SO PCT Int. Appl., 79 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001002575	A1	20010111	WO 2000-CA778	20000628

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRAI US 1999-141270P P 19990630

AB An open reading frame (ORF) encoding tge **Chlamydial** orfF protein has been identified from the C. pneumoniae genome. The gene encoding this protein has been inserted onto the expression plasmid and shown to confer immune protection against **Chlamydial** infection. Accordingly, this orfF and related polypeptides can be used in methods to prevent, treat, and diagnose **Chlamydia** infection in mammals including humans. Modifications are possible within the scope of this invention.

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 24 OF 54 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
AN 2001:259693 BIOSIS
DN PREV200100259693
TI Vascular invasion and persistent **Chlamydia** pneumoniae infection in mucosa-associated lymphoid tissue in a rabbit model.
AU Chiu, Brian [Reprint author]; Fong, Ignatius W. [Reprint author]; Jang, Dan; Mahony, James B.; **Murdin, Andrew**; Peeling, Rosanna; Diep, Chun C. [Reprint author]
CS University of Toronto, 30 Bond Street, Toronto, Ontario, M5B 1W8, Canada
SO FASEB Journal, (March 8, 2001) Vol. 15, No. 5, pp. A937. print.
Meeting Info.: Annual Meeting of the Federation of American Societies for Experimental Biology on Experimental Biology 2001. Orlando, Florida, USA. March 31-April 04, 2001.
CODEN: FAJOEC. ISSN: 0892-6638.
DT Conference; (Meeting)

Conference; Abstract; (Meeting Abstract)
LA English
ED Entered STN: 30 May 2001
Last Updated on STN: 19 Feb 2002
AB **Chlamydia** pneumoniae (Cp), a common respiratory pathogen in humans, has been associated with atherosclerosis, vasculitis and asthma. Systemic dissemination and persistent intracellular infection are crucial mechanisms in the development of Cp-induced diseases. Using the established model of respiratory tract infection, 3 groups of New Zealand White specific-pathogen-free rabbits were inoculated via the nasopharynx with Cp (n=15), C. trachomatis (Ct, n=15) or M. pneumoniae (Mp, n=12) and sacrificed 10 days post-inoculation. Controls were inoculated with carrier buffer (n=12) or without inoculation (n=12). The lungs were examined histologically for alveolar infiltrate (AI), vasculitis (Va), mucosa-associated lymphoid tissue (MALT) and interstitial lymphoid infiltrate (ILI) and the number of foci of each lesion were counted semi-quantitatively in 20 microscopic fields in each section. The lung sections were immunostained with RR402 and CF2 for Cp antigens and with CHsp for **Chlamydia** heat-shock protein 60. Cp inoculation resulted in AI and pneumonia (80%), compared with Mp (90%) and Ct (13%), significantly more foci of vasculitis (mean of Cp=1.4, Ct=0.13, Mp=0.25, Control=0, $p<0.05$) and more foci of MALT (mean of Cp=7.9, Ct=4.8, Mp=5.3, Control=5.8, $p<0.05$). There was no significant difference in the number of foci for ILI in all treatment groups. Cp antigens were demonstrated in foci of all lesions and CHsp in foci of MALT. Our results suggest that Cp invasion of pulmonary vessels may be important in systemic dissemination of the bacteria. MALT lesions are usually seen in airway bifurcations. The presence of both Cp and CHsp antigens further suggests persistent C. pneumoniae infection in these anatomical locations as early as 10 days post-infection. MALT may serve as reservoirs for reaction and dissemination of the pathogen and will be important in the consideration of **vaccination** and antibiotic therapy.

L7 ANSWER 25 OF 54 CAPLUS COPYRIGHT 2003 ACS on STN
AN 2000:790638 CAPLUS
DN 133:334048
TI **Chlamydia** pneumoniae protein and DNA sequences, and their diagnostic and therapeutic uses
IN **Murdin, Andrew D.; Oomen, Raymond P.; Wang, Joe**; Dunn, Pamela
PA Aventis Pasteur Limited, Can.
SO PCT Int. Appl., 112 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000066739	A2	20001109	WO 2000-CA511	20000503
	WO 2000066739	A3	20010111		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	EP 1177301	A2	20020206	EP 2000-925004	20000503
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	JP 2002542827	T2	20021217	JP 2000-615762	20000503

US 2003095973 A1 20030522 US 2000-564479 20000503
PRAI US 1999-132270P P 19990503
US 1999-141276P P 19990630
WO 2000-CA511 W 20000503
AB The invention provides protein and DNA sequences of full-length, 5'-truncated or 3'-truncated 76kDa protein of a strain of **Chlamydia** pneumoniae. The present invention also relates to immunization of a host, including humans, against disease caused by infection by a strain of **Chlamydia**, specifically C. pneumoniae, employing a vector contg. a **Chlamydia** protein gene and a promoter to effect expression of the 76kDa protein gene in the host.

L7 ANSWER 26 OF 54 CAPLUS COPYRIGHT 2003 ACS on STN
AN 2000:666879 CAPLUS
DN 133:251269
TI **Chlamydia** pneumoniae antigenic membrane protein and DNA sequences, and their diagnostic and therapeutic uses
IN **Murdin, Andrew D.**; **Oomen, Raymond P.**; **Wang, Joe**; Dunn, Pamela
PA Aventis Pasteur Limited, Can.
SO PCT Int. Appl., 77 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2000055326	A1	20000921	WO 2000-CA240	20000309
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
NZ 514140	A	20010928	NZ 2000-514140	20000309
EP 1163342	A1	20011219	EP 2000-908862	20000309
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002538825	T2	20021119	JP 2000-605744	20000309

PRAI US 1999-123966P P 19990312
WO 2000-CA240 W 20000309
AB The invention provides protein and DNA sequences of a 60kDa cysteine-rich antigenic membrane protein of a strain of **Chlamydia** pneumoniae. The present invention also relates to immunization of a host, including humans, against disease caused by infection by a strain of **Chlamydia**, specifically C. pneumoniae, employing a vector contg. a **Chlamydia** antigenic membrane protein gene and a promoter to effect expression of the 60kDa cysteine-rich membrane protein gene in the host.
RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 27 OF 54 CAPLUS COPYRIGHT 2003 ACS on STN
AN 2000:646146 CAPLUS
DN 133:221591
TI **Chlamydia** pneumoniae antigenic membrane protein and corresponding DNA fragments and their diagnostic and therapeutic uses
IN **Murdin, Andrew D.**; **Oomen, Raymond P.**; **Wang, Joe**; Dunn, Pamela
PA Aventis Pasteur Limited, Can.
SO PCT Int. Appl., 68 pp.

CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2000053764	A1	20000914	WO 2000-CA239	20000309

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRAI US 1999-123968P P 19990312

AB The invention provides protein and DNA sequences of a 9kDa cysteine-rich antigenic membrane protein of a strain of **Chlamydia** pneumoniae. The present invention also relates to immunization of a host, including humans, against disease caused by infection by a strain of **Chlamydia** , specifically C. pneumoniae , employing a vector contg. a **Chlamydia** antigenic membrane protein gene and a promoter to effect expression of the 9kDa cysteine-rich membrane protein gene in the host.

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 28 OF 54 CAPLUS COPYRIGHT 2003 ACS on STN
AN 2000:457095 CAPLUS
DN 133:88218
TI **Chlamydia** antigens and corresponding DNA fragments and uses thereof
IN **Murdin, Andrew D.; Oomen, Raymond P.; Wang, Joe**
PA Connaught Laboratories Ltd., Can.
SO PCT Int. Appl., 215 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2000039158	A1	20000706	WO 1999-CA1230	19991223

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

EP 1140999	A1	20011010	EP 1999-962008	19991223

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

JP 2003512017	T2	20030402	JP 2000-591069	19991223
US 2002037293	A1	20020328	US 2001-886468	20010622

PRAI US 1998-113280P P 19981223
US 1998-113281P P 19981223
US 1998-113282P P 19981223
US 1998-113283P P 19981223
US 1998-113284P P 19981223

US 1998-113285P P 19981223
US 1998-113385P P 19981223
US 1998-114050P P 19981228
US 1998-114056P P 19981228
US 1998-114057P P 19981228
US 1998-114058P P 19981228
US 1998-114059P P 19981228
US 1998-114061P P 19981228
WO 1999-CA1230 W 19991223

AB The present invention provides purified and isolated polynucleotide mols. that encode **Chlamydia** polypeptides which can be used in methods to prevent, treat, and diagnose **Chlamydia** infection. In one form of the invention, the polynucleotide mols. are selected from DNA that encode polypeptides CPN100686 RY 54 (SEQ ID Nos: 1 and 14), CPN100696 RY-55 (SEQ ID Nos: 2 and 15), CPN100709 RY-57 (SEQ ID Nos: 3 and 16), CPN100710 RY-58 (SEQ ID Nos: 4 and 17), CPN100711 RY-59 (SEQ ID Nos: 5 and 18), CPN100877 RY-61 (SEQ ID Nos: 6 and 19), CPN100325 RY-62 (SEQ ID Nos: 7 and 20), CPN100368 RY-63 (SEQ ID Nos:8 and 21), CPN100624 RY-64 (SEQ ID Nos:9 and 22), CPN100633 RY-65 (SEQ ID Nos:10 and 23), CPN100985 RY-66 (SEQ ID Nos:11 and 24), CPN100987 RY-67 (SEQ ID Nos:12 and 25) and CPN100988 RY-68 (SEQ ID Nos:13 and 26).

RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 29 OF 54 CAPLUS COPYRIGHT 2003 ACS on STN
AN 2000:457094 CAPLUS
DN 133:88217
TI **Chlamydia** antigens and corresponding DNA fragments and uses thereof
IN **Murdin, Andrew D.; Oomen, Raymond P.; Wang, Joe**; Dunn, Pamela
PA Connaught Laboratories Ltd., Can.
SO PCT Int. Appl., 81 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000039157	A1	20000706	WO 1999-CA1224	19991222
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	CA 2356057	AA	20000706	CA 1999-2356057	19991222
	EP 1140998	A1	20011010	EP 1999-960752	19991222
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	JP 2002541766	T2	20021210	JP 2000-591068	19991222
	US 2002081682	A1	20020627	US 2001-892851	20010628
PRAI	US 1998-114060P	P	19981228		
	US 1999-123967P	P	19990312		
	US 1999-141271P	P	19990630		
	WO 1999-CA1224	W	19991222		

AB The present invention provides a method of nucleic acid, including DNA, immunization of a host, including humans, against disease caused by infection by a strain of **Chlamydia** , specifically C. pneumoniae , employing a vector contg. a nucleotide sequence encoding an ATP/ADP

translocase of a strain of **Chlamydia** pneumoniae and a promoter to effect expression of the ATP/ADP translocase gene in the host. Modifications are possible within the scope of this invention.

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 30 OF 54 CAPLUS COPYRIGHT 2003 ACS on STN
AN 2000:402021 CAPLUS
DN 133:42171
TI Two-step immunization procedure against **Chlamydia** infection: administration of attenuated bacteria harboring **Chlamydia** MOMP gene followed by administration of **Chlamydia** MOMP
IN **Murdin, Andrew D.**
PA University of Manitoba, Can.; Connaught Laboratories Limited; Brunham, Robert C.
SO PCT Int. Appl., 32 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000034498	A1	20000615	WO 1999-CA1151	19991202
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	EP 1169465	A1	20020109	EP 1999-957789	19991202
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	JP 2002531135	T2	20020924	JP 2000-586931	19991202
	US 2002168382	A1	20021114	US 1999-453289	19991203
PRAI	US 1998-110855P	P	19981204		
	WO 1999-CA1151	W	19991202		

AB The present invention relates to a **vaccination** procedure for protection of a host against diseases caused by **Chlamydia**, particularly **Chlamydia** trachomatis. The host is immunized against infection by initial administration of an attenuated bacteria harboring a nucleic acid encoding a **Chlamydia** protein followed by administration of a **Chlamydia** protein in immunostimulating complex (ISCOM). The attenuated bacteria may be an attenuated strain of Salmonella or Shigella. The **Chlamydia** protein and gene may be the major outer membrane protein (MOMP). This procedure enables a high level of protection to be achieved.

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 31 OF 54 CAPLUS COPYRIGHT 2003 ACS on STN
AN 2000:384447 CAPLUS
DN 133:13445
TI **Chlamydia** pneumoniae antigens and corresponding DNA fragments
IN **Murdin, Andrew D.; Oomen, Raymond P.; Wang, Joe**
PA Connaught Laboratories Limited, Can.
SO PCT Int. Appl., 174 pp.
CODEN: PIXXD2
DT Patent
LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000032794	A2	20000608	WO 1999-CA1147	19991201
	WO 2000032794	A3	20001109		
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	EP 1135509	A2	20010926	EP 1999-957785	19991201
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	JP 2002531095	T2	20020924	JP 2000-585425	19991201
PRAI	US 1998-110339P	P	19981201		
	US 1998-110340P	P	19981201		
	US 1998-110427P	P	19981201		
	US 1998-110428P	P	19981201		
	US 1998-110438P	P	19981201		
	WO 1999-CA1147	W	19991201		

AB The present invention provides five purified and isolated polynucleotide mols. that encode **Chlamydia** pneumoniae polypeptides which can be used in methods to prevent, treat and diagnose **Chlamydia** infection. In one form of the invention, the polynucleotide mols. are selected from DNA that encode polypeptides CPN100634, CPN100635, CPN100638, CPN100639, and CPN100708.

L7 ANSWER 32 OF 54 CAPLUS COPYRIGHT 2003 ACS on STN
AN 2000:384432 CAPLUS
DN 133:29606
TI A **Chlamydia** pneumoniae 98kDa outer membrane protein and gene sequences, and uses for immunization and diagnosis
IN **Murdin, Andrew D.**; **Oomen, Raymond P.**; **Wang, Joe**; Dunn, Pamela
PA Connaught Laboratories Limited, Can.
SO PCT Int. Appl., 98 pp.
CODEN: PIXXD2
DT Patent
LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000032784	A1	20000608	WO 1999-CA1148	19991201
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	AU 2000037909	A5	20000619	AU 2000-37909	19991201
	EP 1135501	A1	20010926	EP 1999-957786	19991201
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	US 2002094340	A1	20020718	US 1999-452380	19991201
	JP 2002531093	T2	20020924	JP 2000-585415	19991201
	US 2003157124	A1	20030821	US 2002-324129	20021220

PRAI US 1998-110439P P 19981201
US 1999-132272P P 19990503
US 1998-113439P P 19981223
US 1999-452380 B1 19991201
WO 1999-CA1148 W 19991201

AB The invention provides sequences of a **Chlamydia** pneumoniae 98kDa putative outer membrane protein (OMP) CPN100640 and corresponding DNA which can be used in methods to prevent, treat, and diagnose **Chlamydia** infections in mammals, including humans. In particular, a **vaccine** vector encoding OMP or an OMP/signal peptide fusion protein is provided as is its use in immunization against **Chlamydia**. Probes/primers and antibodies for diagnostic use are also provided. BALB/C mice **vaccinated** with an expression vector for OMP antigen showed increased resistance to challenge with C. pneumoniae.

RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 33 OF 54 CAPLUS COPYRIGHT 2003 ACS on STN
AN 2000:314840 CAPLUS
DN 132:333384
TI **Chlamydia** PilG-like antigens and corresponding genes and uses for diagnosis, preventing, and treatment of **Chlamydia** infection
IN **Murdin, Andrew David**; **Oomen, Raymond Peter**; Dunn, Pamela Lesley
PA Connaught Laboratories Limited, Can.
SO PCT Int. Appl., 88 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000026376	A1	20000511	WO 1999-GB3582	19991029
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	US 6403102	B1	20020611	US 1999-428589	19991027
	EP 1124966	A1	20010822	EP 1999-954097	19991029
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				

PRAI US 1998-106071P P 19981029
US 1999-133202P P 19990507
US 1999-428589 A 19991027
WO 1999-GB3582 W 19991029

AB The present invention provides a gene of **Chlamydia** pneumoniae encoding PilG-like proteins found in the bacterial inclusion membrane structure. PilG-like genes and proteins can be used in methods to prevent, treat, and diagnose **Chlamydia** infection in mammals including humans. BALB/C mice **vaccinated** with an expression vector for PilG-like protein showed increased resistance to challenge with C. pneumoniae. **Vaccinated** mice showed slower rates of growth of C. pneumoniae in lungs. Modifications are possible within the scope of this invention.

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 34 OF 54 CAPLUS COPYRIGHT 2003 ACS on STN
AN 2000:314720 CAPLUS
DN 132:346613
TI **Chlamydia** antigens and corresponding DNA fragments and uses thereof
IN **Murdin, Andrew David**; **Oomen, Raymond Peter**; Dunn, Pamela Lesley
PA Connaught Laboratories Limited, Can.
SO PCT Int. Appl., 97 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000026239	A2	20000511	WO 1999-GB3622	19991102
	WO 2000026239	A3	20000810		
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	US 6607730	B1	20030819	US 1999-430723	19991029
	EP 1127065	A2	20010829	EP 1999-954126	19991102
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	AU 753984	B2	20021031	AU 2000-10565	19991102
PRAI	US 1998-106590P	P	19981102		
	US 1999-133071P	P	19990507		
	US 1999-430723	A	19991029		
	WO 1999-GB3622	W	19991102		

AB The present invention provides a method of nucleic acid, including DNA, immunization of a host, including humans, against disease caused by infection by a strain of **Chlamydia**, specifically C. pneumoniae, employing a vector, contg. a nucleotide sequence encoding an POMP91B precursor protein of a strain of **Chlamydia** pneumoniae and a promoter to effect expression of the POMP91B precursor gene in the host. Also provided are fusion proteins and **vaccines** contg. POMP91B precursor protein, POMP91B-specific polyclonal and monoclonal antibodies, polynucleotide probes and primers, and affinity chromatog. method for purifying the polypeptide.

L7 ANSWER 35 OF 54 CAPLUS COPYRIGHT 2003 ACS on STN
AN 2000:314718 CAPLUS
DN 132:333380
TI Sequences of a **Chlamydia** pneumoniae 98kDa putative outer membrane protein, and uses thereof in diagnostic and therapeutic applications
IN **Murdin, Andrew David**; **Oomen, Raymond Peter**; Dunn, Pamela Lesley
PA Connaught Laboratories Limited, Can.
SO PCT Int. Appl., 93 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000026237	A2	20000511	WO 1999-GB3579	19991029

WO 2000026237 A3 20000921
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
US 2003170259 A1 20030911 US 1999-428122 19991027
EP 1124849 A2 20010822 EP 1999-954095 19991029
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO
PRAI US 1998-106070P P 19981029
US 1999-122066P P 19990301
US 1999-428122 A 19991027
WO 1999-GB3579 W 19991029

AB The invention provides sequences of a **Chlamydia** pneumoniae 98kDa putative outer membrane protein (OMP) which can be used in methods to prevent, treat, and diagnose **Chlamydia** infections. In particular, a **vaccine** vector encoding OMP or an OMP/signal peptide fusion protein is provided as is its use in immunization against **Chlamydia**. Probes/primers for diagnostic use are also provided.

L7 ANSWER 36 OF 54 CAPLUS COPYRIGHT 2003 ACS on STN
AN 2000:291251 CAPLUS
DN 132:307251
TI **Chlamydia** pneumoniae 98-kDa outer membrane protein and corresponding DNA and use for **vaccine** immunization
IN **Murdin, Andrew David**; **Oomen, Raymond Peter**; Dunn, Pamela Lesley
PA Connaught Laboratories Limited, Can.
SO PCT Int. Appl., 101 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2000024902	A1	20000504	WO 1999-GB3571	19991028

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

AU 9963598	A1	20000515	AU 1999-63598	19991028
EP 1124965	A1	20010822	EP 1999-951023	19991028

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

US 2002102270	A1	20020801	US 2001-779081	20010208

PRAI US 1998-106046P P 19981028
US 1999-132271P P 19990503
US 1999-427533 A 19991026
WO 1999-GB3571 W 19991028

AB The present invention provides a method of nucleic acid, including DNA, immunization of a host, including humans, against disease caused by infection by a strain of **Chlamydia**, specifically C. pneumoniae , employing a vector, contg. a nucleotide sequence encoding a 98-kDa outer

membrane protein of a strain of **Chlamydia** pneumoniae and a promoter to effect expression of the gene in the host. Modifications are possible within the scope of this invention.

RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 37 OF 54 CAPLUS COPYRIGHT 2003 ACS on STN
AN 2000:291249 CAPLUS
DN 132:307250
TI **Chlamydia** pneumoniae gene lorf2 antigen and corresponding DNA and use for **vaccine** immunization
IN **Murdin, Andrew David**; **Oomen, Raymond Peter**; Dunn, Pamela Lesley
PA Connaught Laboratories Limited, Can.
SO PCT Int. Appl., 88 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000024901	A1	20000504	WO 1999-GB3565	19991028
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	US 6403101	B1	20020611	US 1999-427501	19991026
	AU 9963593	A1	20000515	AU 1999-63593	19991028
	EP 1124964	A1	20010822	EP 1999-951017	19991028
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	US 2002091096	A1	20020711	US 2001-905119	20010713
PRAI	US 1998-106037P	P	19981028		
	US 1999-154658P	P	19990920		
	US 1999-427501	A	19991026		
	WO 1999-GB3565	W	19991028		

AB The present invention provides a method of nucleic acid, including DNA, immunization of a host, including humans, against disease caused by infection by a strain of **Chlamydia**, specifically C. pneumoniae , employing a vector, contg. a nucleotide sequence encoding a lorf2 protein of a strain of **Chlamydia** pneumoniae and a promoter to effect expression of the lorf2 gene in the host. Modifications are possible within the scope of this invention.

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 38 OF 54 CAPLUS COPYRIGHT 2003 ACS on STN
AN 2000:291072 CAPLUS
DN 132:307249
TI **Chlamydia** antigens and corresponding DNA fragments and their uses for diagnosis and treatment of **Chlamydia** infection
IN **Murdin, Andrew D.**; **Oomen, Raymond P.**; **Wang, Joe**
PA Connaught Laboratories Limited, Can.
SO PCT Int. Appl., 226 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000024765	A2	20000504	WO 1999-CA992	19991028
	WO 2000024765	A3	20001109		
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	EP 1129202	A2	20010905	EP 1999-955602	19991028
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	JP 2002530052	T2	20020917	JP 2000-578335	19991028
PRAI	US 1998-106034P	P	19981028		
	US 1998-106039P	P	19981028		
	US 1998-106042P	P	19981028		
	US 1998-106044P	P	19981028		
	US 1998-106072P	P	19981029		
	US 1998-106073P	P	19981029		
	US 1998-106074P	P	19981029		
	US 1998-106087P	P	19981029		
	US 1998-106587P	P	19981102		
	US 1998-106588P	P	19981102		
	US 1998-106589P	P	19981102		
	US 1998-107034P	P	19981102		
	US 1998-107035P	P	19981102		
	WO 1999-CA992	W	19991028		

AB The present invention provides purified and isolated polynucleotide mols. that encode 13 **Chlamydia** pneumoniae polypeptides which can be used in methods to prevent, treat, and diagnose **Chlamydia** infection. The nucleotide and deduced amino acid sequences of the 13 genes and proteins are provided.

L7 ANSWER 39 OF 54 CAPLUS COPYRIGHT 2003 ACS on STN
AN 2000:145036 CAPLUS
DN 132:176659
TI **Chlamydia** pneumoniae antigens and corresponding DNA fragments and their diagnostic and therapeutic uses
IN **Murdin, Andrew D.; Oomen, Raymond P.**
PA Connaught Laboratories Limited, Can.
SO PCT Int. Appl., 203 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000011183	A2	20000302	WO 1999-IB1449	19990818
	WO 2000011183	A3	20000608		
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	CA 2341637	AA	20000302	CA 1999-2341637	19990818

	AU 9952973	A1	20000314	AU 1999-52973	19990818
	EP 1104470	A2	20010606	EP 1999-938465	19990818
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
PRAI	US 1998-97187P	P	19980820		
	US 1998-97188P	P	19980820		
	US 1998-97189P	P	19980820		
	US 1998-97190P	P	19980820		
	US 1998-97195P	P	19980820		
	US 1998-97196P	P	19980820		
	US 1998-97197P	P	19980820		
	US 1998-97191P	P	19980827		
	US 1999-376770	A2	19990817		
	WO 1999-IB1449	W	19990818		

AB In the **Chlamydia** pneumoniae genome, 8 open reading frames encoding **chlamydial** polypeptides are provided. These polypeptides include polypeptides permanently found in the bacterial membrane structure, polypeptides that are present in the external vicinity of the bacterial membrane, polypeptides permanently found in the inclusion membrane structure, polypeptides that are present in the external vicinity of the inclusion membrane, and polypeptides that are released into the cytoplasm of the infected cell. These polypeptides can be used in **vaccination** methods for preventing and treating **Chlamydia** infection. Thus, the present invention provides a method of nucleic acid immunization of a host, including humans, against disease caused by infection by a strain of **Chlamydia** pneumoniae, employing a vector contg. a nucleotide sequence encoding any of the following polypeptides: CPN 100111, CPN 100224, CPN 100230, CPN 100231, CPN 100232, CPN 100235, CPN 100394, CPN 100395 and a promoter to effect expression of any of the polypeptides in the host.

L7 ANSWER 40 OF 54 CAPLUS COPYRIGHT 2003 ACS on STN
AN 2000:145034 CAPLUS
DN 132:205395
TI Antigenic inclusion membrane protein C of **Chlamydia** and the gene encoding it and their uses
IN **Murdin, Andrew D.**; Dunn, Pamela L.; **Oomen, Raymond P.**
PA Connaught Laboratories Limited, Can.
SO PCT Int. Appl., 68 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000011181	A1	20000302	WO 1999-CA766	19990819
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	CA 2340330	AA	20000302	CA 1999-2340330	19990819
	AU 9953660	A1	20000314	AU 1999-53660	19990819
	EP 1105490	A1	20010613	EP 1999-939280	19990819
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	US 6521745	B1	20030218	US 1999-377399	19990820
PRAI	US 1998-97199P	P	19980820		
	US 1999-132961P	P	19990507		

WO 1999-CA766 W 19990819

AB An isolated and purified nucleic acid mol. encoding the inclusion membrane protein C of a strain of **Chlamydia**, is useful for nucleic acid immunization of a host, including a human host, against disease caused by infection by a strain of **Chlamydia**, particularly C. pneumoniae. The gene was cloned by PCR. BALB/C mice **vaccinated** with an expression vector for the protein showed increased resistance to challenge with C. pneumoniae. **Vaccinated** mice showed slower rates of growth of C. pneumoniae in the lungs than did control animals.

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 41 OF 54 CAPLUS COPYRIGHT 2003 ACS on STN
AN 2000:145033 CAPLUS
DN 132:205394
TI An antigenic outer membrane protein, POMP91A, of **Chlamydia** and the gene encoding it and their uses
IN **Murdin, Andrew D.**; Dunn, Pamela L.; **Oomen, Raymond P.**
PA Connaught Laboratories Limited, Can.
SO PCT Int. Appl., 98 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2000011180	A1	20000302	WO 1999-CA765	19990819
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2340283	AA	20000302	CA 1999-2340283	19990819
AU 9953659	A1	20000314	AU 1999-53659	19990819
EP 1105489	A1	20010613	EP 1999-939279	19990819
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
PRAI US 1998-97198P	P	19980820		
WO 1999-CA765	W	19990819		

AB An isolated and purified nucleic acid mol. encoding a POMP91A protein of a strain of **Chlamydia**, is useful for nucleic acid immunization of a host, including a human host, against disease caused by infection by a strain of **Chlamydia**, particularly C. pneumoniae. The gene was cloned by PCR. BALB/C mice **vaccinated** with an expression vector for the protein showed increased resistance to challenge with C. pneumoniae. **Vaccinated** mice showed slower rates of growth of C. pneumoniae in the lungs than did control animals.

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 42 OF 54 CAPLUS COPYRIGHT 2003 ACS on STN
AN 2000:98784 CAPLUS
DN 132:147637
TI Protein and DNA sequences encoding a **Chlamydia** pneumoniae outer membrane protein (designated CPN100314), and uses thereof in **vaccines** and diagnostic assays
IN **Murdin, Andrew D.**; **Oomen, Raymond P.**; Dunn, Pamela L.
PA Connaught Laboratories Limited, Can.
SO PCT Int. Appl., 52 pp.

CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000006743	A2	20000210	WO 1999-IB1333	19990727
	WO 2000006743	A3	20000504		

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT

RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

	CA 2336534	AA	20000210	CA 1999-2336534	19990727
	AU 9947934	A1	20000221	AU 1999-47934	19990727
	EP 1108033	A2	20010620	EP 1999-931399	19990727

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI

PRAI	US 1998-94203P	P	19980727
	US 1999-122045P	P	19990301
	US 1999-360434	A	19990726
	WO 1999-IB1333	W	19990727

AB This invention provides protein and DNA sequences encoding a **Chlamydia** pneumoniae outer membrane protein, designated CPN100314. The invention also provides for the use of the disclosed protein/gene in **vaccines** against **Chlamydia**. Thus, the invention discloses a vector contg. a nucleotide sequence (gene omp) encoding CPN100314 operably linked to a promoter to effect expression of CPN100314 in the host. The invention also provides for the use of the CPN100314 protein/gene in diagnostic assays for **Chlamydia** infection.

L7 ANSWER 43 OF 54 CAPLUS COPYRIGHT 2003 ACS on STN
AN 2000:98783 CAPLUS
DN 132:147636
TI Protein and DNA sequences encoding a **Chlamydia** pneumoniae antigen (designated CPN100605), and uses thereof in **vaccines** and diagnostic assays
IN **Murdin, Andrew D.; Oomen, Raymond P.**
PA Connaught Laboratories Limited, Can.
SO PCT Int. Appl., 48 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000006742	A2	20000210	WO 1999-IB1331	19990727
	WO 2000006742	A3	20000427		

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

	US 2002150591	A1	20021017	US 1999-361443	19990726
	CA 2336532	AA	20000210	CA 1999-2336532	19990727
	AU 9947932	A1	20000221	AU 1999-47932	19990727

EP 1105488 A2 20010613 EP 1999-931397 19990727
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI
PRAI US 1998-94195P P 19980727
US 1999-361443 A 19990726
US 1998-94192P P 19980727
WO 1999-IB1331 W 19990727
AB This invention provides protein and DNA sequences encoding a **Chlamydia** pneumoniae protein, designated CPN100605. The invention also provides for the use of the disclosed protein/gene in **vaccines** against **Chlamydia**. Thus, the invention discloses a vector contg. a nucleotide sequence encoding CPN100605 operably linked to a promoter to effect expression of CPN100605 in the host. The invention also provides for the use of the CPN100605 protein/gene in diagnostic assays for **Chlamydia** infection.

L7 ANSWER 44 OF 54 CAPLUS COPYRIGHT 2003 ACS on STN
AN 2000:98781 CAPLUS
DN 132:147635
TI Protein and DNA sequences encoding a **Chlamydia** pneumoniae outer membrane protein (designated CPN100501), and uses thereof in **vaccines** and diagnostic assays
IN **Murdin, Andrew D.**; **Oomen, Raymond P.**; Dunn, Pamela L.
PA Connaught Laboratories Limited, Can.
SO PCT Int. Appl., 55 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2000006741	A1	20000210	WO 1999-IB1330	19990727
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2337493	AA	20000210	CA 1999-2337493	19990727
AU 9947931	A1	20000221	AU 1999-47931	19990727
EP 1100919	A1	20010523	EP 1999-931396	19990727
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				

PRAI US 1998-94192P P 19980727
US 1999-122044P P 19990301
US 1999-361440 A2 19990726
WO 1999-IB1330 W 19990727
AB This invention provides protein and DNA sequences encoding a **Chlamydia** pneumoniae outer membrane protein, designated CPN100501. The invention also provides for the use of the disclosed protein/gene in **vaccines** against **Chlamydia**. Thus, the invention discloses a vector contg. a nucleotide sequence (gene mip) encoding CPN100501 operably linked to a promoter to effect expression of CPN100501 in the host. The invention also provides for the use of the CPN100501 protein/gene in diagnostic assays for **Chlamydia** infection.
RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 45 OF 54 CAPLUS COPYRIGHT 2003 ACS on STN
AN 2000:98780 CAPLUS

DN 132:147634
TI Protein and DNA sequences encoding a **Chlamydia** pneumoniae antigen (designated CPN100149), and uses thereof in **vaccines** and diagnostic assays
IN **Murdin, Andrew D.; Oomen, Raymond P.**
PA Connaught Laboratories Limited, Can.
SO PCT Int. Appl., 51 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2000006740	A1	20000210	WO 1999-IB1329	19990727
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 2003147924	A1	20030807	US 1999-361040	19990726
CA 2336708	AA	20000210	CA 1999-2336708	19990727
AU 9947930	A1	20000221	AU 1999-47930	19990727
EP 1100918	A1	20010523	EP 1999-931395	19990727
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
PRAI US 1998-94191P	P	19980727		
US 1999-361040	A2	19990726		
WO 1999-IB1329	W	19990727		

AB This invention provides protein and DNA sequences encoding a **Chlamydia** pneumoniae protein, designated CPN100149. The invention also provides for the use of the disclosed protein/gene in **vaccines** against **Chlamydia**. Thus, the invention discloses a vector contg. a nucleotide sequence encoding CPN100149 operably linked to a promoter to effect expression of CPN100149 in the host. The invention also provides for the use of the CPN100149 protein/gene in diagnostic assays for **Chlamydia** infection.
RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 46 OF 54 CAPLUS COPYRIGHT 2003 ACS on STN
AN 2000:98778 CAPLUS
DN 132:147633
TI Protein and DNA sequences encoding a **Chlamydia** pneumoniae antigen (designated CPN100202), and uses thereof in **vaccines** and diagnostic assays
IN **Murdin, Andrew D.; Oomen, Raymond P.**
PA Connaught Laboratories Limited, Can.
SO PCT Int. Appl., 45 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2000006739	A2	20000210	WO 1999-IB1328	19990727
WO 2000006739	A3	20010816		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK,				

US 6635746 B1 20031021 US 1999-254450 19990528
PRAI US 1996-713236 A2 19960912
WO 1997-CA656 W 19970911
AB Immunogenic compns. including **vaccines** are described that comprise an outer membrane antigen ext. of a strain of **Chlamydia** and are effective in protection against disease caused by **Chlamydia** infection. The immunogenic compns. may comprise the major outer membrane protein (MOMP) of **Chlamydia** which may be in a homooligomeric form or complexed with at least one other antigen of **Chlamydia**. The immunogenic compn. may include an immunostimulating complex (ISCOM) and the outer membrane antigen may be incorporated therein. The immunogenic compns. have utility as **chlamydial vaccines** and in diagnostic applications.
RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 52 OF 54 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 4
AN 1995:207652 BIOSIS
DN PREV199598221952
TI Poliovirus hybrids expressing neutralization epitopes from variable domains I and IV of the major outer membrane protein of **Chlamydia** trachomatis elicit broadly cross-reactive C. trachomatis-neutralizing antibodies.
AU **Murdin, Andrew D.**; Su, Hua; Klein, Michel H.; Caldwell, Harlan D.
CS Connaught Center Biotechnology Res., 1755 Steeles Ave. West, Willowdale, ON M2R 3T4, Canada
SO Infection and Immunity, (1995) Vol. 63, No. 3, pp. 1116-1121.
CODEN: INFIBR. ISSN: 0019-9567.
DT Article
LA English
ED Entered STN: 23 May 1995
Last Updated on STN: 23 May 1995
AB Trachoma and sexually transmitted diseases caused by **Chlamydia** trachomatis are major health problems worldwide. Epitopes from the variable domains of the major outer membrane protein are candidates for **vaccine** development. We have constructed hybrid polioviruses expressing sequences from major outer membrane protein variable domains I and IV. Antisera to the hybrids could, in combination, strongly neutralize 8 of the 12 C. trachomatis serovars most commonly associated with oculogenital infections and weakly neutralize the others.

L7 ANSWER 53 OF 54 CAPLUS COPYRIGHT 2003 ACS on STN
AN 1995:382778 CAPLUS
DN 122:142485
TI Hybrid picornaviruses expressing **chlamydial** epitopes
IN **Murdin, Andrew David**; Caldwell, Harlan Delano; Klein, Michel Henri; **Oomen, Raymond Peter**
PA Connaught Laboratories Ltd., Can.
SO PCT Int. Appl., 98 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9426900	A2	19941124	WO 1994-CA262	19940512
W: AU, BR, CA, CN, FI, JP, KR, NO, NZ, RU, UA, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CA 2162664	AA	19941124	CA 1994-2162664	19940512
AU 9467183	A1	19941212	AU 1994-67183	19940512
EP 698100	A1	19960228	EP 1994-915485	19940512

R: DE, FR, GB
PRAI US 1993-60978 19930513
WO 1994-CA262 19940512
AB Hybrid picornaviruses expressing **chlamydial** epitopes from the major outer membrane protein (MOMP) of **Chlamydia** trachomatis in a functional form are described. The hybrid viruses grow to high titer in cell culture and when administered to mammals induce an immune response against both the picornavirus and C. trachomatis. The antisera from immunized mammals neutralized both homotypic and heterotypic serovars of C. trachomatis. The hybrid picornaviruses have utility as **vaccines** and as tools for the generation of immunol. reagents. Methods for modifying surface exposed loops of known sequences to produce hybrid proteins are described. Thus using a SalI-HindIII mutagenesis cartridge, the PV1-Mahoney cDNA clone pT7XLD was modified to encode amino acid sequence from C. trachomatis MOMP variable domain I and variable domain IV. The mutagenesis cartridge is contained between poliovirus nucleotides 2753-2791, which encode poliovirus amino acids 1092-1104 that include the BC loop of capsid protein VP1. The polio-specific nucleotide sequence within the cartridge was replace with synthetic oligonucleotides encoding the C. trachomatis MOMP epitopes. Several details strategies are presented for genetic engineering of the picornavirus constructs. The advantages of the hybrid picornaviruses include (1) growth of the hybrid picornaviruses to a high titer, (2) the capability to induce a strong and cross-reactive anti-**chlamydial** immune response at the same time as inducing a strong anti-polio immune response, (3) administration of the picornaviruses as oral **vaccines** in combination with one or more other immunogenic and/or immunostimulating mols., (4) and no possibility of potentiating **chlamydial** disease by sensitizing **vaccines** because of the absence of the 57-kDa SRP.

L7 ANSWER 54 OF 54 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 5
AN 1993:523250 BIOSIS
DN PREV199396136657
TI A poliovirus hybrid expressing a neutralization epitope from the major outer membrane protein of **Chlamydia** trachomatis is highly immunogenic.
AU **Murdin, Andrew D.** [Reprint author]; Su, Hua; Manning, D. Scott; Klein, Michel H.; Parnell, Michael J.; Caldwell, Harlan D.
CS Connaught Centre Biotechnol. Res., 1755 Steeles Ave. West., Willowdale, ON M2R 3T4, Canada
SO Infection and Immunity, (1993) Vol. 61, No. 10, pp. 4406-4414.
CODEN: INFIBR. ISSN: 0019-9567.
DT Article
LA English
ED Entered STN: 19 Nov 1993
Last Updated on STN: 19 Nov 1993
AB Trachoma and sexually transmitted diseases caused by **Chlamydia** trachomatis are major health problems worldwide. Epitopes on the major outer membrane protein (MOMP) of C. trachomatis have been identified as important targets for the development of **vaccines**. In order to examine the immunogenicity of a recombinant vector expressing a **chlamydial** epitope, a poliovirus hybrid was constructed in which part of neutralization antigenic site I of poliovirus type 1 Mahoney (PV1-M) was replaced by a sequence from variable domain I of the MOMP of C. trachomatis serovar A. The **chlamydial** sequence included the neutralization epitope VAGLEK. This hybrid was viable, grew very well compared with PV1-M, and expressed both poliovirus and **chlamydial** antigenic determinants. When inoculated into rabbits, this hybrid was highly immunogenic, inducing a strong response against both PV1-M and C. trachomatis serovar A. Antichlamydia titers were 10- to 100-fold higher than the titers induced by equimolar amounts of either purified MOMP or a synthetic peptide expressing the VAGLEK epitope. Furthermore, rabbit

antisera raised against this hybrid neutralized **chlamydial** infectivity both in vitro, for hamster kidney cells, and passively in vivo, for conjunctival epithelia of cynomolgus monkeys. Because poliovirus infection induces a strong mucosal immune response in primates and humans, these results indicate that poliovirus-**chlamydia** hybrids could become powerful tools for the study of mucosal immunity to **chlamydial** infection and for the development of recombinant **chlamydial vaccines**.

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=> s chlamydia pneumoniae
L9         9649 CHLAMYDIA PNEUMONIAE

=> s l9 and vaccin?
L10         481 L9 AND VACCIN?

=> s l10 and (dna vaccin? or nucleic acid vaccin?)
L11          65 L10 AND (DNA VACCIN? OR NUCLEIC ACID VACCIN?)

=> dup rem l11
PROCESSING COMPLETED FOR L11
L12          55 DUP REM L11 (10 DUPLICATES REMOVED)

=> d bib ab 1-55

L12   ANSWER 1 OF 55  BIOTECHDS COPYRIGHT 2003 THOMSON DERWENT/ISI on STN
AN    2003-22294  BIOTECHDS
TI    New immunogenic preparation, useful for preparing a composition for
      treating or preventing infections caused by HIV, Hepatitis B or C virus,
      Rous-Sarcoma virus or Chlamydia pneumoniae;
         immunogenic production and mRNA for use in disease gene therapy
AU    PASCOLO S C; HOERR I; RAMMENSEE H; VON DER MUELBE F; MICHEL M; FIRAT H;
      LEMONNIER F A
PA    CUREVAC GMBH; INST PASTEUR; INSERM INST NAT SANTE and RECH MEDICALE;
      GENETHON III
PI    WO 2003059381 24 Jul 2003
AI    WO 2003-EP497 20 Jan 2003
PRAI  FR 2002-12894 16 Oct 2002; DE 2002-1001732 18 Jan 2002
DT    Patent
LA    English
OS    WPI: 2003-598482 [56]
AB    DERWENT ABSTRACT:
      NOVELTY - An immunogenic preparation comprising mature mRNA coding for at
      least one antigen of a pathogenic agent, is new.
           DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a
      vaccine comprising the immunogenic preparation.
           BIOTECHNOLOGY - Preferred Preparation: The RNA is non-replicative
      mature mRNA, and its sequence comprises stabilizing sequences capable of
      increasing the half-life of the RNA in the cytosol. Part of the
      stabilizing sequences is selected from transcribed but not translated
      sequences (UTR) of the beta-globin gene and the consensus sequence
      (C/U)CCANxCCC(U/A)PyxUC(C/U)CC contained in the 3' UTR of the RNAs coding
      for alpha-(I)-collagen, 15-lipoxygenase, and tyrosine hydroxylase. The
      RNA has a polyA tail of more than 30 residues at the 3' end, and has
      been synthesized in the presence of ribonucleosides modified for
      resisting degradation by RNases. It also contains phosphorothioates; is
      essentially free of destabilizing AURES sequences and of sequences
      recognized by endonucleases; contains a sequence susceptible of
      increasing its translation, comprises at least one RNA stabilizing
      factor, in particular an RNase inhibitor; and is complexed with at least
      one cationic, preferably polycationic peptide or protein, which is a
      protamine, poly-L-lysine, poly-L-arginine or a histone. The preparation
      comprises at least immunomodulating agent selected from
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lipopolysaccharides, glycoprotein 96, oligonucleotides containing CpG motives and cytokins. The RNA is highly purified before the addition of one or more adjuvants; is a pool of mRNAs; comprises an internal ribosome entry site (IRES); has part of it coding for cytokins capable of stimulating or polarizing the immune response, and encodes at least one antigen of a pathogenic agent e.g. a polyepitope (of HIV), a full length or truncated viral or bacterial protein such as a surface antigen of Hepatitis B virus comprising the small and medium envelope proteins, or the CORE protein of Hepatitis C virus.

ACTIVITY - Virucide; Anti-HIV; Hepatotropic; Antibacterial. No biological data given.

MECHANISM OF ACTION - **Vaccine**.

USE - The immunogenic preparation is useful for preparing a composition for treating or preventing infections caused by HIV, Hepatitis B or C virus, Rous-Sarcoma virus or **Chlamydia pneumoniae** (claimed).

ADMINISTRATION - The preparation is formulated for cutaneous or intradermal administration (claimed). No dosage details given.

EXAMPLE - No relevant examples given. (39 pages)

L12 ANSWER 2 OF 55 BIOTECHDS COPYRIGHT 2003 THOMSON DERWENT/ISI on STN
AN 2003-09015 BIOTECHDS
TI Method for identifying a subject susceptible to vascular disease (e.g. abdominal aortic aneurysm) by detecting the presence or absence of a bacteriophage Phi Cpn1 host Chlamydia component in the sample, or an antibody to the component;
vascular disease or infection diagnosis, and prevention by use of recombinant **vaccine** or **nucleic acid vaccine**
AU BRUNHAM R C; KARUNAKARAN P; BLANCHARD J
PA UNIV BRITISH COLUMBIA
PI WO 2002095413 28 Nov 2002
AI WO 2002-CA730 23 May 2002
PRAI US 2001-293373 23 May 2001; US 2001-293373 23 May 2001
DT Patent
LA English
OS WPI: 2003-148489 [14]
AB DERWENT ABSTRACT:

NOVELTY - Identifying (M1) a subject susceptible to vascular disease comprising detecting the presence or absence of a bacteriophage phiCpn1 host Chlamydia component in the sample, or an antibody to the component, is new.

DETAILED DESCRIPTION - Identifying (M1) a subject susceptible to vascular disease comprising detecting the presence or absence of a bacteriophage phiCpn1 host Chlamydia component in the sample, or an antibody to the component, is new. (M1) comprises: (a) providing a sample from a subject to be tested for susceptibility to vascular disease; and (b) detecting the presence or absence of a bacteriophage phiCpn1 host Chlamydia component in the sample, or an antibody to the component, where the presence of the component or antibody is indicative of the presence of the host Chlamydia in the subject and susceptibility of the subject to a vascular disease. INDEPENDENT CLAIMS are also included for: (1) an isolated antibody (I) that binds to an antigen with a sequence comprising 553, 186, 148, 35, 31 or 327 amino acids fully defined in the specification (designated Vp1, P1-5, respectively); (2) a composition (II) for eliciting an immune response in a mammal specific to phiCpn1, or Chlamydia comprising phiCpn1, comprising: (a) one or more of the Vp1, P1, P2, P3, P4 or P5 peptides, its immunogenic fragment, or a peptide with substantial identity to it, or a nucleic acid encoding the peptide or fragment; and (b) a pharmaceutical carrier; and (3) a kit (III) for use in the method above comprising in a commercial package: (a) one or more detecting groups selected from: (i) a phiCpn1 peptide, or a peptide with substantial sequence identity to a phiCpn1 peptide or its fragment; (ii)

an antibody that binds to a phiCpn1 peptide; (iii) one or more oligonucleotides complementary to a phiCpn1 nucleic acid; (iv) an antibody that binds to Chlamydia AR39 elementary bodies; or (v) a peptide that binds to (a.iv); and (b) instructions for the use of the detecting groupss for detecting the presence of a bacteriophage of phiCpn1 host Chlamydia component in a sample from a subject.

BIOTECHNOLOGY - Preferred Method: (M1) further comprises obtaining bodily fluid from the subject to be tested. The sample is a sample of bodily fluid from the subject to be tested. The sample is a bacteria, virus, antibody, peptide, or nucleic acid containing fraction from a bodily fluid obtained from the subject. The host Chlamydia is C. pneumoniae, particularly strain AR39. Detection of the host Chlamydia component includes detecting a Chlamydia elementary body, or an antibody binding to the elementary body. In this method, it is unknown if the subject has a risk factor or predisposition to vascular disease. Preferably, the subject does not have a hypercholesterolemic condition. Detection of the host Chlamydia component includes detecting a Phi Cpn1 peptide or peptide with a sequence substantially identical to a Phi Cpn1 peptide, or detecting an antibody to the peptide. Detecting also comprises antibody binding to the peptide, particularly to a Phi Cpn1 peptide or a Phi Cpn1 capsid peptide. The method also includes detecting the antibody in the sample, or sequencing peptides in the sample and comparing the sequences obtained to the Vp1, P1, P2, P3, P4 or P5 peptide sequences. The detection of the host Chlamydia component also includes detecting a Phi Cpn1 nucleic acid, or a nucleic acid having a nucleotide sequence substantially identical to a Phi Cpn1 nucleic acid. The method further comprises amplification of Phi Cpn1 nucleic acids in the sample, and recombinant expression of Phi Cpn1 nucleic acids in the sample to provide the nucleic acid. The detection of the nucleic acid comprises binding a complementary oligonucleotide to the nucleic acid. It also involves sequencing nucleic acids in the sample and comparing the sequences obtained to a sequence comprising 4532 base pairs fully defined in the specification. The method further comprises selecting a course of treatment for Chlamydia infection, and treating the subject for Chlamydia infection, particularly by administering an antibiotic effective against Chlamydia to the subject. Preferred Antibody: The antibody binds to a Phi Cpn1 capsid protein, or Vp1. The antibody is produced by: (a) administering to a mammal the Vp1, P1, P2, P3, P4 or P5 peptide, its immunogenic fragment, or a polypeptide with substantial sequence identity to it; and (b) separating the antibody or a cell producing the antibody from the mammal. Preferred Kit: The kit further comprises an antibody that binds to the antibodies of the subject.

ACTIVITY - Antibacterial. No biological data given.

MECHANISM OF ACTION - None given.

USE - The method is useful for identifying a subject susceptible to vascular disease, particularly abdominal aortic aneurysm (AAA). The method is further useful for selecting a course of treatment for Chlamydia infection, and treating the subject for Chlamydia infection.

ADMINISTRATION - No administration routes or dosage details given.

EXAMPLE - No suitable example given. (41 pages)

L12 ANSWER 3 OF 55 BIOTECHDS COPYRIGHT 2003 THOMSON DERWENT/ISI on STN
AN 2003-00447 BIOTECHDS
TI **Vaccine** useful for immunizing an animal, comprising at least one polynucleotide having a Chlamydia sequence or at least one Chlamydia antigen;
plasmid-mediated gene tramsfer and expression in host cell for Chlamydia sp, infection **nucleic acid** **vaccine** and gene therapy
AU JOHNSTON S A
PA UNIV TEXAS SYSTEM
PI WO 2002047718 20 Jun 2002
AI WO 2001-US48773 17 Dec 2001

PRAI US 2000-255839 15 Dec 2000; US 2000-255839 15 Dec 2000
DT Patent
LA English
OS WPI: 2002-583472 [62]
AB DERWENT ABSTRACT:

NOVELTY - A **vaccine** (I) comprising at least one polynucleotide (Ia) having a Chlamydia sequence or at least one Chlamydia antigen (Ib), and a pharmaceutically acceptable carrier, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following: (1) obtaining (M1) polynucleotide sequences effective for generating an immune response against Chlamydia in an animal; (2) preparing antigens that confer protection against infection in a vertebrate animal; (3) preparing antibodies against (Ib); (4) assaying for the presence of Chlamydia infection in a vertebrate animal; (5) a kit (K) for assaying Chlamydia infection, comprising a pharmaceutically acceptable carrier and an antibody directed against Chlamydia antigen, in a suitable container means; and (6) testing for antigens for a first disease state or infectious agent.

WIDER DISCLOSURE - The following are disclosed: (1) an isolated polynucleotide comprising a region that comprises a sequence (S1) selected from any one of the sequences fully defined in the specification, their complements, fragments or sequences comprising 17, preferably 200 or more contiguous nucleic acids of S1, encoding (Ia) and obtainable by screening a Chlamydia genome; (2) an isolated Chlamydia antigen polypeptide, and its preparation; (3) antibodies against Chlamydia antigens; (4) an expression construct comprising the above said polynucleotide under the control of a heterologous promoter; and (5) therapeutic kits comprising (Ia) or (Ib).

BIOTECHNOLOGY - Preferred **Vaccine**: (Ia) has a C.psittaci sequence or a C.pneumoniae sequence, isolated from a Chlamydia genomic DNA expression library. (Ia) encodes an antigen comprising a sequence selected from any one of 28 sequences fully defined in the specification. (Ia) is contained in a genetic immunization vector comprising a gene encoding a mouse ubiquitin fusion polypeptide and a promoter (e.g. CMV promoter) operable in eukaryotic cells. (Ia) is cloned into a viral expression vector selected from adenovirus, adeno- associated virus, retrovirus and herpes-simplex virus. (I) further comprises at least a first polynucleotide having a C.psittaci sequence (comprising 591 nucleotides fully defined in the specification) and a second polynucleotide having a sequence different from that of the first polynucleotide.

ACTIVITY - Antibacterial.

MECHANISM OF ACTION - **Vaccine**. C.psittaci of the uterine mucosa reduces fertility, the basis of the economic interest in a C.psittaci **vaccine**. Four groups of heifers were used. One group was the naive unchallenged control, another the naive, challenged control, a third received the same pool of 14 gene fragments that were tested in mice, and the fourth group was **vaccinated** with an experimental, inactivated **vaccine** of elementary bodies (EB) and also challenged. After a prime and one boost, the heifers were estrous synchronized by prostaglandin injection, were in heat 2-3 days later, and were artificially inseminated, simultaneously receiving an intracervical chlamydial challenge of 3x107 inclusion forming units. The heifers were palpated for pregnancy at six weeks after insemination. The challenge was very high in order to maximize the difference between positive and negative control animals. This was necessary because only a small number of cows could be justified for its high-risk experiment. Three out of four animals became pregnant in the positive control (non-challenged) group, 0/4 in the elementary body **vaccine** group. The genetic **vaccine** of the pooled genes performed at least as well as the EB **vaccine**.

USE - (Ib) is useful for immunizing an animal, by providing at least one Chlamydia antigen or its antigenic fragment to the animal, in an

amount effective to induce an immune response in the animal e.g. mammals including bovine or human. The method is effective to induce an immune response against C.psittaci, C.pneumoniae or non-Chlamydia infection. The method further involves administering to the animal an antigen or an antigenic fragment from Chlamydia species other than C.psittaci or C.pneumoniae or an antigenic fragment from a non-Chlamydia species (claimed).

ADMINISTRATION - (Ia) is administered through intramuscular (at a dose of 1.0-200 microg), epidermal (at a dose of 0.01-5.0 microg), intravenous, subcutaneous, intralesional, intraperitoneal, oral or inhaled routes. A second intramuscular injection and epidermal injection are administered at least about three weeks after the first injection (claimed).

EXAMPLE - Chlamydia psittaci strain B577 (ATCC VR-656) was grown in BGMK cells and elementary bodies (EB) were purified by renograff gradient centrifugation. Genomic DNA was isolated from EB by proteinase K and RNase digestion followed by cetyl-trimethyl ammonium bromide. Genomic DNA was physically sheared using a nebulizer, then size fractionated on a 1.5% TBE agarose gel. Agarose with fragments between 300-700 base pairs was excised and the DNA was electroeluted. Adaptors (top strand 5'-GATCTGGATCCCGAT, ATCGGGCTCCA) were tagged onto the fragments, then the fragments were cloned into pCMVi-UBs at the BglII site. The ligations were transformed into DH5 alpha electrocompetent cells and plated onto 150 mm diameter YT-Ampicillin (75 microg/ml final concentration) plates. The resulting plates had 2400-3400 individual clones per plate. After the plates were incubated overnight at 37degreesC, the colonies were lifted using nitrocellulose filters soaked in L-Broth with 8% dimethyl sulfoxide (DMSO), and the filters were stored. The original agar plates were then incubated at 37degreesC for an additional six hours. Ten ml of L Broth was added to each plate, Escherichia coli was scraped into 150 ml of L Broth and grown at 37degreesC for 30 minutes. Ampicillin was then added to a final concentration of 50 microg/ml, and the cultures were grown overnight at 37degreesC. Cells were pelleted and the DNA was purified. DNA from the pools was injected into 6-week old female NIH-Swiss mice. Eighteen of the groups also received gene gun inoculations, with 2.5 microg DNA inoculated into each ear. The animals were boosted once at nine weeks. All mice received intramuscular injections, but only the same 18 groups received gene gun injections - then intranasally challenged with 5.5x105 IFU of C.psittaci strain B577 at 13 weeks. The mice were sacrificed 11 days after the challenge, and lungs were weighed. The positive pools were inoculated on nitrocellulose fibers and 48 DNA pools were intramuscular injected into 6-week old BALB/c mice at 50 microg DNA/animal. For the initial inoculation, the mice did not receive gene gun inoculations. At seven weeks, the mice were boosted with 50 microg DNA/animal. In addition to the intramuscular injections, the first 31 groups received gene gun inoculations at 2.5 microg DNA/ear, however, the gene gun failed at group 32, and the last 17 groups received only intramuscular injections. The mice were given a higher challenge, 1.6x106 IFU C.psittaci B577, at 12 weeks. Animals were sacrificed. Colonies from the microtiter plates that were judged to be positive were arrayed. E.coli from wells at either full by full protection or full by partial protection was streaked out onto YT-plates supplemented with 75 microg/ml ampicillin. Six colonies from each plate were tested by polymerase chain reaction (PCR) colony screening, using primers FS-UB (5'-CCGCACCCTCTCTGATTAC and CTGGAGTGGCAACTTCC). Colonies with different sizes, hence different inserts, were sequenced using ABI Big Dye terminator and the FS-UB primer. Samples were purified and the generated sequences were analyzed for open reading frames. (184 pages)

L12 ANSWER 4 OF 55 BIOTECHDS COPYRIGHT 2003 THOMSON DERWENT/ISI on STN
AN 2002-09049 BIOTECHDS
TI Novel **Chlamydia pneumoniae** protein useful in the manufacture of a medicament for treatment or prevention of infection due

to Chlamydia, preferably **Chlamydia pneumoniae**, and for diagnostic purposes;
bacterium recombinant protein useful for DNA probe in polymerase chain reaction, infection gene therapy and recombinant **vaccine**

AU RATTI G; GRANDI G
PA CHIRON SPA
PI WO 2002002606 10 Jan 2002
AI WO 2000-IB1445 3 Jul 2000
PRAI GB 2000-31706 22 Dec 2000
DT Patent
LA English
OS WPI: 2002-154726 [20]
AB DERWENT ABSTRACT:

NOVELTY - A **Chlamydia pneumoniae** protein (I) selected from a protein comprising one of 189 272-973 residue amino acid sequences (S1), all fully defined in the specification, a fragment of S1, or a protein having 50 % or greater sequence identity to S1, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following: (1) a nucleic acid molecule (II) selected from a molecule which encodes (I), a fragment of (II), a sequence complementary to them, a nucleic acid molecule comprising a sequence having 50 % or greater sequence identity to them, or a nucleic acid molecule which hybridizes to them under high stringency conditions; and (2) a composition (III) comprising (I) or (II).

WIDER DISCLOSURE - Disclosed as new are the following: (1) a vector comprising (II); and (2) a host cell transformed with the vector of (1).

BIOTECHNOLOGY - Preparation: (I) is prepared by standard recombinant synthesis.

ACTIVITY - Antibacterial.

MECHANISM OF ACTION - **Vaccine** (claimed); gene therapy. No biological data is given.

USE - (III) is useful as a **vaccine** composition, as a pharmaceutical, or in the manufacture of a medicament for the treatment or prevention of infection due to Chlamydia, preferably C. pneumoniae (claimed). (I) is useful for detecting C. pneumoniae in a sample. (II) is useful in polymerase chain reaction (PCR), branched DNA probe assay or blotting techniques for determining the presence of cDNA or mRNA.

ADMINISTRATION - (III) is administered by subcutaneous, intravenous, intramuscular, oral, pulmonary, transdermal or transcutaneous route at a dose of 0.01-50, preferably 0.05-10 mg/kg.

EXAMPLE - Open reading frames (ORFs) of **Chlamydia pneumoniae** (Cpn) were cloned in such a way as to potentially obtain three different kinds of proteins: Proteins having an hexa-histidine tag at the C-terminus (cpn-His), proteins having a glutathione S-transferase (GST) fusion partner at the N-terminus (Gst-cpn), and proteins having both hexa-histidine tag at the C-terminus and GST at the N-terminus (GST/His fusion, NH2-GST-cpn-(His)6-COOH). Expression vectors pGEX-NN and pGEX-NNH were constructed. Chromosomal DNA of C. pneumoniae strain was prepared. Synthetic oligonucleotide primers were designed on the basis of the coding sequence of each ORF using the sequence of C. pneumoniae strain CWL029, and amplification was performed and polymerase chain reaction (PCR) products was purified and digested. The cloning vectors (pET21b+, pGEX-NN, and pGEX-NNH) were also digested. 75 ng of the appropriately digested and purified vectors and the digested and purified fragments corresponding to each ORF, were ligated in final volumes of 10-20 micro-l with a molar ratio of 1:1 fragment/vector, using 400 units T4 DNA ligase. Transformation in Escherichia coli DH5 competent cells was performed. The ligation reaction was mixed with 200 micro-l of competent DH5 cells, and incubated on ice. After cooling on ice, 0.8 ml Luria-Bertani (LB) medium was added and the cells were incubated. 100 and 900 micro-l of cell suspensions were plated on separate plates of agar LB 100 micro-g/ml Ampicillin and the plates were incubated. The transformants were then screened by growing randomly chosen clones in 6

ml LB 100 micro-g/ml Ampicillin, by extracting the DNA and by digesting 2 micro-l of plasmid mini-preparation with the restriction enzymes specific for the restriction cloning sites. After agarose gel electrophoresis of the digested plasmid mini-preparations, positive clones were chosen. 1 micro-l of each right plasmid mini-preparation was transformed in 200 micro-l of competent E. coli strain suitable for expression of the recombinant protein. All pET21b+ recombinant plasmids were transformed in BL21 DE3 E. coli cells, while all pGEX-NN and all pGEX-NNH recombinant plasmids were transformed in BL21 cells. After plating transformation mixtures on LB/Amp agar plates and incubation, single colonies were inoculated in 3 ml LB 100 micro-g/ml Ampicillin and grown until OD600 of the pET clones reached the 0.4-0.8 value or until OD600 of the pGEX clones reached 0.8-1 value. Protein expression was induced by adding isopropyl-B-D-thiogalactopyranoside (IPTG) to the mini-cultures. After 3 hours incubation the final OD600 was checked and the cultures were cooled on ice. After centrifugation, the cell pellet was suspended in 50 micro-l of protein loading sample buffer. A volume of boiled sample corresponding to 0.1 OD600 culture was analyzed by sodium dodecyl sulfate-polyacrylamide gel electrophoresis (SDS-PAGE) and Coomassie Blue staining to verify the presence of induced protein band. The recombinant proteins were then purified.(364 pages)

L12 ANSWER 5 OF 55 BIOTECHDS COPYRIGHT 2003 THOMSON DERWENT/ISI on STN
AN 2002-15070 BIOTECHDS
TI Novel **vaccine** for preventing, treating infectious diseases caused by virus, fungi, protozoa and bacteria, has a carrier strain having membrane vesicle of a microorganism integrated into cell surface of carrier strain;
recombinant **vaccine** and **nucleic acid** **vaccine** for use in infection prevention
AU KADURUGAMUWA J L; BEVERIDGE T J
PA KADURUGAMUWA J L; BEVERIDGE T J
PI US 2002028215 7 Mar 2002
AI US 1999-370860 9 Aug 1999
PRAI US 1999-370860 9 Aug 1999
DT Patent
LA English
OS WPI: 2002-315046 [35]
AB DERWENT ABSTRACT:
NOVELTY - A **vaccine** (I) against an infectious disease caused by an infectious agent comprising a carrier strain having a membrane vesicle (MV) of a microorganism integrated into the cell surface of the carrier strain, where MV has an amount of an antigen associated with its surface which is effective to provide protection against the infectious agent, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following: (1) a pharmaceutical composition (II) comprising a MV of a microorganism containing one or more enzymes with peptidoglycan hydrolase, lipase and proteolytic activity in an amount effective to have a bactericidal effect on gram-negative and/or gram-positive bacterial pathogens; (2) a drug delivery system comprising a MV of a microorganism containing a therapeutic agent in an amount effective to introduce the therapeutic agent into a host; and (3) inserting (III) a nucleic acid molecule into a target cell which comprises encapsulating the nucleic acid in a MV of a microorganism, and bringing the MV in contact with the cell.

WIDER DISCLOSURE - Also disclosed are: (1) preparing a (multivalent) **vaccine** against an infectious disease caused by (different) infectious agent; (2) antibodies against a MV of a microorganism for use in passive immunization; and (3) screening for an immunogenic antigen of a pathogen.

BIOTECHNOLOGY - Preparation: (I) is prepared by integrating a MV produced by a microorganism into the cell surface of a carrier strain.

Preferred **Vaccine**: The infectious agent is a microorganism which produces MVs, such as Pseudomonas aeruginosa, Escherichia coli, Salmonella gastroenteritis, S.typhi, S.enteriditis, Shigella flexneri, S.sonnie, S.dysenteriae, Neisseria gonorrhoeae, N.meningitidis, Haemophilus influenzae, H.pleuropneumoniae, Pasteurella haemolytica, P.multilocida, Legionella pneumophila, Treponema pallidum, T.denticola, T.orale, Borrelia burgdorferi, Borrelia spp., Leptospira interrogans, Klebsiella pneumoniae, Proteus vulgaris, P.morganii, P. mirabilis, Rickettsia prowazeki, R.typhi, R.richettsii, Porphyromonas gingivalis (Bacteriodes), Chlamydia psittaci, C.pneumoniae, C.trachomatis, Campylobacter jejuni, C.intermedis, C.fetus, Helicobacter pylori, Francisella tularenisis, Vibrio cholerae, Vibrio para haemolyticus, Bordetella pertussis, Burkholderie pseudomallei, Brucella abortus, B. susi, B.melitensis, B.canis, Spirillum minus, Pseudomonas mallei, Aeromonas hydropila, A.salmonicida, and Yersinia pestis. MV is a natural MV of the microorganism containing outer membrane and periplasm components. MV is a large MV, obtained by treating the microorganism with a surface-active agent, and is characterized by containing outer membrane, cytoplasmic membrane or plasma membrane, and cytoplasm components. (I) is effective against another infectious agent comprising a second carrier strain having a MV of a microorganism integrated into the cell surface of the second carrier strain. Preferred Composition: (II) contains a therapeutic agent, which is an antimicrobial or antiviral agent, preferably aminoglycoside. (II) additionally comprises MVs of another microorganism.

ACTIVITY - Antibacterial; Virucide; Fungicide; Protozoacide; Anti-HIV.

MECHANISM OF ACTION - **Vaccine**. Six-to seven week old female BALB/c mice were immunized orally through a gavage tube, with 0.3 ml of one of the test **vaccines**: Ty21a (2x10 power 8 colony forming unit (CFU)/ml), PAO1 MVs (100 microg protein/ml), M90T MVs (100 fig protein/ml), Ty21a (2x108 CFU/ml)+M90TMVs (at 100 microg protein/ml), Ty21a (2x108 CFU/ml)+PAO1 MVs (100 microg/ml), Ty21a (2x108 CFU/ml)+PAO1 MVs+ M90T MVs (at 100 microg protein/ml), and a control group with 0.3 ml sterile phosphate buffered saline (PBS). All **vaccines** were suspended immediately before immunization in 3% NaHCO3 in phosphate buffered saline (PBS) at pH 8.0, and given four times at one week intervals. One week after the final immunization, mice were sacrificed, bled and the serum was collected. MVs-specific antibodies in serum and mucosal washes, were determined. Immunization of mice with PAO1 MVs alone elicited a higher antigen-specific antibody response in serum and lung than in the group immunized with the Ty21a carrier strain with integrated PAO1 MVs. In contrast, M80T-specific antibody titers in both serum and gut washes were higher when M90T MVs were delivered after integration into the carrier strain. These titers declined when PAO1 MVs were incorporated into the Ty21a+M90T MV construct. In separate experiments, a decrease was observed in viable Ty21a cells with 0.5 hours following integration of PAO1 MVs into Ty21a. A reduction in viable Ty21a cells was also observed when M90T MVs were added to the carrier strain. However, this reduction was only 5% as opposed to 40% by PAO1 MVs. Even with the reduction in cell numbers, clear immune responses were seen in the mice. Serum or mucosal samples in which specific immunoglobulins could be detected by enzyme linked immunosorbent assay (ELISA) were next analyzed by Western blotting to determine whether the induced antibodies were directed against lipopolysaccharide (LPS) or protein antigens. The antibody response to M90T MVs was weak with barely detectable bands on Western blots. Immunoblotting of non-deproteinized samples with serum, lung, or gut washes revealed several immunoreactive protein-specific antibody responses to the PAO1 and M90T **vaccine** constructs. On these immunoblots, the LPS-specific antibody response was also visible for both PAO1 and M90T. The antibody response to the carrier strain, Ty21a, was mainly protein-specific. This study confirmed that highly specific antigenic factors from two gram negative pathogens (P.aeruginosa

and S.flexneri) when introduced into an attenuated Salmonella strain (Ty21a) by the MV-fusion technique, induced humoral and mucosal responses against the introduced antigens.

USE - (II) is useful for treating an infectious disease caused by a gram-negative and/or gram-positive bacterial pathogen. (III) is useful for inserting a nucleic acid molecule encoding a protein which is endogenous or exogenous to a microorganism, preferably a mammalian, viral, fungal or protozoal protein, into a target cell (claimed). (I) is useful for the prophylaxis or active immunization and treatment of infectious diseases caused by microorganisms which produce natural MVs, including viruses such as human immonodeficiency virus (HIV), adenovirus, Herpes simplex, measles, simian immunodeficiency virus, fungi such as Histoplasma capsulatum, Cryptococcus neoformans, Blastomyces dermatitidis, Candida albicans, protozoa such as Leishmania mexicana, Plasmodium falciparum and Toxoplasma gondii, and, gram-positive bacteria such as Streptococcus mutans, and S.pneumoniae, gram-negative pathogens such as E.coli, Proteus vulgaris, Serratia marscens, Klebsiella pneumoniae and Pseudomonas aeruginosa. Impermeable antimicrobial agents such as gentamicin can be introduced into epithelial cells using gentamicin-induced MV from Shigella flexneri. Thus, the MV can be used for the delivery of antimicrobial agents into a host. MVs are useful for preparing antibodies which may be used as a passive immunization.

ADMINISTRATION - (I) is administered intravenously, intramuscularly, subcutaneously, intraperitoneally, intranasally or orally. (I) contains 1x10 power 9-5x10 power 10, preferably 5x10 power 9-2x10 power 10 carrier strain cells with integrated MV per dosage unit.

ADVANTAGE - MVs are prepared simply and they readily fuse to carrier strains without complicated mixing formulations. The fusion is thermodynamically stable. The use of MVs also permits the simultaneous expression of multiple protective antigens (e.g. LPS and outer membrane proteins (OMPs)) from a number of pathogens in a single carrier strain, and this multivalent carrier strain then delivers the heterologous antigens to the immune system. This is an economical method for inducing protective immunity against a range of serotypes or antigenic variants by fusion of MVs from such pathogens.

EXAMPLE - Membrane vesicles (MVs) were isolated form exponentially growing cells of Pseudomonas aeruginosa PAO1 serotype O5 and Shigella flexneri M90T serotype 5. Cells from 0.5 l cultures grown in Trypticase soy both (TSB) were removed from suspension by centrifugation. The supernatants were filtered to remove residual cells. MVs were removed from the resulting filtrates by centrifugation at 150000x g for 3 hours at 5 degrees C. Exponentially growing cultures of Salmonella typhi Ty21a in TSB were washed and diluted in phosphate buffered saline (PBS), pH 7.4, to produce a bacterial suspension of 108 colony forming unit (CFU)/ml. These were mixed 4:1 with MVs suspension (each MV preparation at 100 microg protein/ml) for either PAO1 or M90T, or a mixture from both strains, and incubated at 37 degrees C. The fusion of MVs from M90T and PAO1 with Ty21a was demonstrated by immunogold labeling of whole amounts and thin sections using lipopolysaccharide (LPS) specific polyclonal antibodies to M90T or monoclonal antibodies to PAO1 LPS. (62 pages)

L12 ANSWER 6 OF 55 CAPLUS COPYRIGHT 2003 ACS on STN
AN 2002:392223 CAPLUS
DN 136:397052
TI Compounds and methods for treatment and diagnosis of Chlamydial infection
IN Bhatia, Ajay; Skeiky, Yasir A. W.; Probst, Peter
PA USA
SO U.S. Pat. Appl. Publ., 66 pp., Cont.-in-part of U.S. Ser. No. 620,412.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 9

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

PI	US 2002061848	A1	20020523	US 2001-841132	20010423
	US 6448234	B1	20020910	US 2000-620412	20000720
	WO 2002008267	A2	20020131	WO 2001-US23121	20010720
	WO 2002008267	A3	20030227		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

	EP 1307564	A2	20030507	EP 2001-959114	20010720

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

	NO 2003000252	A	20030314	NO 2003-252	20030117
PRAI	US 2000-620412	A2	20000720		
	US 1998-208277	A2	19981208		
	US 1999-288594	A2	19990408		
	US 1999-410568	A2	19991001		
	US 1999-426571	A2	19991022		
	US 1999-454684	A2	19991203		
	US 2000-556877	A2	20000419		
	US 2000-598419	A2	20000620		
	US 2001-841132	A	20010423		
	WO 2001-US23121	W	20010720		

AB Compds. and methods for the diagnosis and treatment of Chlamydial infection are disclosed. The compds. provided include polypeptides that contain at least one antigenic portion of a Chlamydia antigen and DNA sequences encoding such polypeptides. Pharmaceutical compns. and **vaccines** comprising such polypeptides or DNA sequences are also provided, together with antibodies directed against such polypeptides. Diagnostic kits contg. such polypeptides or DNA sequences and a suitable detection reagent may be used for the detection of Chlamydial infection in patients and in biol. samples. Compds. and methods for the diagnosis and treatment of Chlamydial infection are disclosed. The compds. provided include polypeptides that contain at least one antigenic portion of a Chlamydia antigen and DNA sequences encoding such polypeptides. Pharmaceutical compns. and **vaccines** comprising such polypeptides or DNA sequences are also provided, together with antibodies directed against such polypeptides. Diagnostic kits contg. such polypeptides or DNA sequences and a suitable detection reagent may be used for the detection of Chlamydial infection in patients and in biol. samples.

L12 ANSWER 7 OF 55 CAPLUS COPYRIGHT 2003 ACS on STN
AN 2002:688472 CAPLUS
DN 137:231341
TI Chlamydia antigens for treatment and diagnosis of Chlamydial infection
IN Probst, Peter; Bhatia, Ajay; Skeiky, Yasir A. W.; Fling, Steven P.
PA Corixa Corporation, USA
SO U.S., 34 pp., Cont.-in-part of U.S. 6,166,177.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 9

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6447779	B1	20020910	US 1999-288594	19990408
	US 6166177	A	20001226	US 1998-208277	19981208
	US 6555115	B1	20030429	US 1999-410568	19991001
	WO 2000034483	A2	20000615	WO 1999-US29012	19991208

DT Patent
LA English
OS WPI: 2002-049447 [06]
AB A **vaccine** (I) is claimed. (I) contains a vector having a sequence (SS) of ATP binding cassette gene, secretary locus open reading gene, endopeptidase gene, protease gene, metal or protease gene, CLP protease, ATP-ase gene, CLP-protease subunit gene, transglycolase or transpeptidase gene, CLPc-protease gene, or thioredoxin gene of Chlamydia pneumaniae, or a protein (PP) encoded by the sequence. Also claimed are: a pharmaceutical composition (PC); a fusion protein (II); an antibody (Ab) specific to (II); a commercial package containing (SS) or its fragments, PP or its fragments and instructions for use in eliciting an immune response in a mammal; and expression plasmid pCACPNM213, plasmid pCACPNM882, plasmid pCACPNM208, plasmid pCACPNM1096, plasmid pCACPNM1097, plasmid pCACPNM908, plasmid pCACPNM909, plasmid pCACPNMA440, plasmid pCACPNM459 or plasmid pCACPNM708. (I), (II) or Ab is useful for treating or preventing Chlamydia infection. (III) and (IV) is useful for diagnosing the presence of Chlamydia in a biological sample. Ab or (IV) is useful for purifying a protein by antibody-based affinity chromatography. (355pp)

L12 ANSWER 11 OF 55 BIOTECHDS COPYRIGHT 2003 THOMSON DERWENT/ISI on STN
AN 2002-02939 BIOTECHDS
TI Novel polypeptides from **Chlamydia pneumoniae** and genes encoding the polypeptide, useful for immunization of host e.g. human against disease caused by infection by a strain of Chlamydia; vector expression in host cell, antibody, antisense, DNA primer, DNA probe for diagnosis, **nucleic acid vaccine** and gene therapy
AU Murdin A D; Oomen R P; Wang J; Dunn P
PA Aventis-Pasteur
LO Toronto, Ontario, Canada.
PI WO 2001075114 11 Oct 2001
AI WO 2001-CA462 4 Apr 2001
PRAI US 2000-194477 4 Apr 2000
DT Patent
LA English
OS WPI: 2001-648559 [74]
AB An isolated transmembrane protein (I) from **Chlamydia pneumoniae** having a specified 579 amino acid protein sequence, its immunogenic fragment containing at least 12 consecutive amino acids or a protein with has been modified without loss of immunogenicity and which has 75% sequence identity to (I), is new. Also claimed are: a nucleic acid molecule (II) which encodes (I) with a 1,940 bp DNA sequence; an antisense DNA to (II); a fusion protein containing (I); a **vaccine**; vector expression in a host cell; a DNA probe of 5-100 bp; a DNA primer of 10-40 bp; an antibody; a pharmaceutical composition and a diagnostic kit; and plasmid pCACPNM643. (I) has antibiotic activity for protecting mice from infection. The above may be used for Chlamydia sp. infection diagnosis, gene therapy and **nucleic acid vaccination**. (90pp)

L12 ANSWER 12 OF 55 BIOTECHDS COPYRIGHT 2003 THOMSON DERWENT/ISI on STN
AN 2002-02938 BIOTECHDS
TI Novel Chlamydia myosin heavy chain homolog polypeptide and polynucleotide for preventing, detecting and treating Chlamydia infection in mammals, particularly humans; vector expression in host cell, antibody, antisense, DNA primer, DNA probe for diagnosis, **nucleic acid vaccine** and gene therapy
AU Murdin A D; Oomen R P; Wang J; Dunn P
PA Aventis-Pasteur
LO Toronto, Ontario, Canada.

PI WO 2001075113 11 Oct 2001
AI WO 2001-CN461 4 Apr 2001
PRAI US 2000-194475 4 Apr 2000
DT Patent
LA English
OS WPI: 2001-648558 [74]
AB An isolated myosin heavy chain homolog protein (I) from **Chlamydia pneumoniae** having a specified 254 amino acid protein sequence, its immunogenic fragment containing at least 12 consecutive amino acids or a protein with has been modified without loss of immunogenicity and which has 75% sequence identity to (I), is new. Also claimed are: a nucleic acid molecule (II) which encodes (I) with a 965 bp DNA sequence; an antisense DNA to (II); a fusion protein containing (I); a **vaccine**; vector expression in a host cell; a DNA probe of 5-100 bp; a DNA primer of 10-40 bp; an antibody; a pharmaceutical composition and a diagnostic kit; and plasmid pCACPNM559. (I) has antibiotic activity for protecting mice from infection. The above may be used for Chlamydia sp. infection diagnosis, gene therapy and **nucleic acid vaccination**. (83pp)

L12 ANSWER 13 OF 55 BIOTECHDS COPYRIGHT 2003 THOMSON DERWENT/ISI on STN
AN 2002-02937 BIOTECHDS
TI Novel Chlamydia glutamate-binding protein and polynucleotide for preventing, detecting and treating Chlamydia infection in mammals, particularly humans;
vector expression in host cell, antibody, antisense, DNA primer, DNA probe for diagnosis, **nucleic acid vaccine** and gene therapy
AU Murdin A D; Oomen R P; Wang J; Dunn P
PA Aventis-Pasteur
LO Toronto, Ontario, Canada.
PI WO 2001075112 11 Oct 2001
AI WO 2001-CA460 4 Apr 2001
PRAI US 2000-194472 4 Apr 2000
DT Patent
LA English
OS WPI: 2001-648557 [74]
AB An isolated glutamate-binding protein (I) from **Chlamydia pneumoniae** having a specified 250 amino acid protein sequence, its immunogenic fragment containing at least 12 consecutive amino acids or a protein with has been modified without loss of immunogenicity and which has 75% sequence identity to (I), is new. Also claimed are: a nucleic acid molecule (II) which encodes (I) with a 953 bp DNA sequence; an antisense DNA to (II); a fusion protein containing (I); a **vaccine**; vector expression in a host cell; a DNA probe of 5-100 bp; a DNA primer of 10-40 bp; an antibody; a pharmaceutical composition and a diagnostic kit; and plasmid pCACPNM653. (I) has antibiotic activity for protecting mice from infection. The above may be used for Chlamydia sp. infection diagnosis, gene therapy and **nucleic acid vaccination**. (86pp)

L12 ANSWER 14 OF 55 BIOTECHDS COPYRIGHT 2003 THOMSON DERWENT/ISI on STN
AN 2002-02936 BIOTECHDS
TI Novel isolated myosin heavy chain polypeptide from **Chlamydia pneumoniae** and polynucleotides encoding them, useful for treating and preventing Chlamydia infection in mammals;
vector expression in host cell, antibody, antisense, DNA primer, DNA probe for diagnosis, **nucleic acid vaccine** and gene therapy
AU Murdin A D; Oomen R P; Wang J; Dunn P
PA Aventis-Pasteur
LO Toronto, Ontario, Canada.
PI WO 2001075111 11 Oct 2001

AI WO 2001-CA456 4 Apr 2001
PRAI US 2000-194471 4 Apr 2000
DT Patent
LA English
OS WPI: 2001-648556 [74]
AB An isolated myosin heavy chain protein (I) from **Chlamydia pneumoniae** having a specified 168 amino acid protein sequence, its immunogenic fragment containing at least 12 consecutive amino acids or a protein with has been modified without loss of immunogenicity and which has 75% sequence identity to (I), is new. Also claimed are: a nucleic acid molecule (II) which encodes (I) with a 707 bp DNA sequence; an antisense DNA to (II); a fusion protein containing (I); a **vaccine**; vector expression in a host cell; a DNA probe of 5-100 bp; a DNA primer of 10-40 bp; an antibody; a pharmaceutical composition and a diagnostic kit; and plasmid pCACPNM760. (I) has antibiotic activity for protecting mice from infection. The above may be used for Chlamydia sp. infection diagnosis, gene therapy and **nucleic acid vaccination**. (83pp)

L12 ANSWER 15 OF 55 BIOTECHDS COPYRIGHT 2003 THOMSON DERWENT/ISI on STN
AN 2002-02920 BIOTECHDS
TI Novel Chlamydia ATP-binding cassette and corresponding DNA molecule for preventing, diagnosing and treating Chlamydia infections in mammals, in particular humans;
vector expression in host cell, antibody, antisense, DNA primer, DNA probe for diagnosis, **nucleic acid vaccine** and gene therapy
AU Murdin A D; Oomen R P; Wang J; Dunn P
PA Aventis-Pasteur
LO Toronto, Ontario, Canada.
PI WO 2001074863 11 Oct 2001
AI WO 2001-CA455 4 Apr 2001
PRAI US 2000-194464 4 Apr 2000
DT Patent
LA English
OS WPI: 2001-648549 [74]
AB An isolated ATP-binding cassette protein (I) from **Chlamydia pneumoniae** having a specified 532 amino acid protein sequence, its immunogenic fragment containing at least 12 consecutive amino acids or a protein with has been modified without loss of immunogenicity and which has 75% sequence identity to (I), is new. Also claimed are: a nucleic acid molecule (II) which encodes (I) with a 1,799 bp DNA sequence; an antisense DNA to (II); a fusion protein containing (I); a **vaccine**; vector expression in a host cell; a DNA probe of 5-100 bp; a DNA primer of 10-40 bp; an antibody; a pharmaceutical composition and a diagnostic kit; and plasmid pCACPNM209. (I) has antibiotic activity for protecting mice from infection. The above may be used for Chlamydia sp. infection diagnosis, gene therapy and **nucleic acid vaccination**. (88pp)

L12 ANSWER 16 OF 55 BIOTECHDS COPYRIGHT 2003 THOMSON DERWENT/ISI on STN
AN 2001-15837 BIOTECHDS
TI Novel chlamydial **vaccine** for inducing protective immune response against Chlamydia infection e.g. sexually transmitted disease, conjunctivitis, pneumonia, comprises chlamydial outer membrane porin, PorB;
the use of Chlamydia infection **nucleic acid vaccine** and recombinant **vaccine**
AU Stephens R S; Kubo A
PA Univ.California
LO Oakland, CA, USA.
PI WO 2001056605 9 Aug 2001
AI WO 2001-US3462 1 Feb 2001

PRAI US 2000-179592 1 Feb 2000
DT Patent
LA English
OS WPI: 2001-488846 [53]
AB A **vaccine** composition (I) is claimed. (I) contains an isolated chlamydial outer membrane porin protein, PorB protein or an isolated polynucleotide containing a sequence encoding PorB protein capable of inducing an immune response in a subject. Also claimed are: providing a subject with protective immunity to chlamydial infection; determining exposure of a subject to Chlamydia infection; detecting (II) Chlamydia infection in a subject; and identifying (III) an agent that inhibits PorB function. (I) useful for inducing immunity against Chlamydial in a mammalian subject to decrease risk of onset of disease caused by Chlamydia. (I) provides immunoprotective response against chlamydial infection of Chlamydia trachomatis, **Chlamydia pneumoniae** and Chlamydia psittaci. Human disease associated with chlamydial infection that can be mitigated or prevented using the **vaccine**, include sexually transmitted disease, conjunctivitis, pneumonia, Reiter syndrome etc. The compounds identified by (III) are useful for treating diseases associated with Chlamydia infection. (54pp)

L12 ANSWER 17 OF 55 BIOTECHDS COPYRIGHT 2003 THOMSON DERWENT/ISI on STN
AN 2001-10575 BIOTECHDS
TI New non-replicating vector comprising a Chlamydia trachomatis serine-threonine-kinase gene is useful as a **DNA vaccine** against chlamydial infection, e.g. lung infection caused by C. trachomatis;
Chlamydia trachomatis, **Chlamydia pneumoniae** infection **nucleic acid vaccine**
AU Brunham R C
PA Univ.Manitoba
LO Winnipeg, Manitoba, Canada.
PI WO 2001021811 29 Mar 2001
AI WO 2000-CA1097 21 Sep 2000
PRAI US 1999-401780 22 Sep 1999
DT Patent
LA English
OS WPI: 2001-308088 [32]
AB A new non-replicating vector (I) is claimed. (I) contains a nucleotide sequence encoding a serine-threonine-kinase (STK) or its fragment, which generates a STK-specific immune response, and a promoter sequence operatively coupled to the nucleotide sequence for expression of the STK in a host cell to which the vector is administered. Also claimed are: a method (M1) of using a gene encoding a STK of strain of Chlamydia, or a fragment, that generates a STK-specific immune response to produce an immune response in a host; a method (M2) of producing a **vaccine** for protection of a host against a disease caused by infection with a strain of Chlamydia; formulating (I) as a **vaccine** for in vivo administration to a host; and a **vaccine** produced by (M2). The non-replicating vector containing Chlamydia trachomatis STK gene is useful for producing or generating a protective immune response in a human host against Chlamydia infection. The vector is also useful as a **nucleic acid vaccine** against Chlamydia infection. The vector or the **vaccine** is useful for generating host protective antibodies against Chlamydia peumoniae, C. trachomatis. (26pp)

L12 ANSWER 18 OF 55 BIOTECHDS COPYRIGHT 2003 THOMSON DERWENT/ISI on STN
AN 2001-10979 BIOTECHDS
TI New lpxB polypeptides useful for treating, preventing or diagnosing Chlamydia infections, particularly infections caused by **Chlamydia pneumoniae**, e.g. bronchitis, cough, asthma;
recombinant protein gene useful in gene therapy, drug screening,

recombinant **vaccine** and **nucleic acid** **vaccine**

AU Murdin A D; Oomen R P; Wang J; Dunn P
PA Aventis-Pasteur
LO Toronto, Ontario, Canada.
PI WO 2001021810 29 Mar 2001
AI WO 2000-CA1085 15 Sep 2000
PRAI US 1999-154461 17 Sep 1999
DT Patent
LA English
OS WPI: 2001-328102 [34]
AB A novel protein (I) is claimed. (I) contains a fully defined sequence (IIa) of 604 amino acids, an immunogenic fragment (IIb); (IIa) or (IIb) which has been modified to improve its immunogenicity and is at least 75% identical to (IIa) or (IIb) a sequence encoded by an antisense sequence to the above sequence, or a protein and additional protein. Also claimed are: a nucleic acid (II); a DNA (III); a DNA (IV); a **vaccine** (V); a unicellular host (VI) transformed with (II); a DNA probe (VIIa) or DNA primer (VIIb) or its homolog, complement, or antisense sequence; producing (I); an antibody (VIII); treating (M1) or detecting (M2) Chlamydia infection; a diagnostic kit (IX); identifying (M3) a (I) that induces immune response effective to prevent Chlamydia infection; an expression plasmid (X) pCABk1043; and a DNA (XI); and protein 1 pxB (XII) from Chlamydia. (I), (II), (V) and (VIII) are useful as pharmaceutical compositions. The DNAs encoding the Chlamydia 1pxB protein are useful as a **vaccine** in preventing, treating or diagnosing **Chlamydia pneumoniae** infection. The polynucleotides are used in producing the encoded protein, or in the construction of **vaccine** vectors. (80pp)

L12 ANSWER 19 OF 55 BIOTECHDS COPYRIGHT 2003 THOMSON DERWENT/ISI on STN
AN 2001-08884 BIOTECHDS
TI Novel **Chlamydia pneumoniae** hypothetical apoptosis inhibitor antigen and polynucleotides encoding them useful as component of **vaccines** for treating Chlamydia infections, and for detecting Chlamydia infection;
plasmid pCAI1033-mediated gene transfer, expression in Escherichia coli, DNA probe, DNA primer, antibody and antisense oligonucleotide for recombinant **vaccine**, **nucleic acid** **vaccine** and gene therapy

AU Murdin A D; Oomen R P; Wang J; Dunn P
PA Aventis-Pasteur
LO Toronto, Ontario, Canada.
PI WO 2001021806 29 Mar 2001
AI WO 2000-CA1090 15 Sep 2000
PRAI US 1999-154324 17 Sep 1999
DT Patent
LA English
OS WPI: 2001-266075 [27]
AB A protein (I) which is a fully defined sequence of **Chlamydia pneumoniae** hypothetical apoptosis inhibitor (HAI) protein sequence of 384 amino acids (S2, specified), an immunogenic fragment (S5) of S2 containing 12 consecutive amino acids or a protein of (I) or the immunogenic fragment that is modified to improve its immunogenicity, and having 75% identity to S2 or S5, is claimed. Also claimed are: a DNA (II) containing a sequence which encodes (I); a DNA (III) containing a sequence which is antisense to (II); a DNA (IV) containing a sequence which encodes a fusion protein, containing (I) encoded by (II) and an additional protein; a **vaccine** containing (I), (II) or (IV) and a **vaccine** vector; a pharmaceutical composition containing (I), (II) or (IV); a unicellular host cell (e.g. Escherichia coli) transformed with (II), (III) or (IV); a DNA probe; a DNA primer; a protein encoded by (II) or (IV); a fusion protein (V) containing (I); preparation of (I); an

antibody against (I); a **vaccine** containing (I) or (V); a diagnostic kit; identifying (I) or (V); plasmid pCAI1033; and a C. pneumoniae HAI. The DNAs and the proteins are useful as **vaccines** and in gene therapy. (75pp)

L12 ANSWER 20 OF 55 BIOTECHDS COPYRIGHT 2003 THOMSON DERWENT/ISI on STN
AN 2001-10978 BIOTECHDS
TI New gene secretion pathway protein-E polypeptides and nucleic acids encoding the polypeptides useful for treating, preventing or diagnosing Chlamydia infections, particularly infections caused by **Chlamydia pneumoniae**;
recombinant protein production via plasmid pCAI284 expression in host cell useful in gene therapy
AU Murdin A D; Oomen R P; Wang J; Dunn P
PA Aventis-Pasteur
LO Toronto, Ontario, Canada.
PI WO 2001021805 29 Mar 2001
AI WO 2000-CA1089 15 Sep 2000
PRAI US 1999-154595 17 Sep 1999
DT Patent
LA English
OS WPI: 2001-328101 [34]
AB A nucleic acid (I) encoding a protein (II) is claimed. (II) contains a fully defined sequence of 496 amino acids, an immunogenic fragment containing at least 12 consecutive amino acids, or a fully defined sequence or an immunogenic fragment which has been modified to improve its immunogenicity and which is at least 75% identical to the above sequence. Also claimed are: a **DNA**; **vaccines**; a unicellular host transformed with the DNA; a DNA probe or a DNA primer; a protein encoded by the DNAs; a method of producing a protein; an antibody against the protein; pharmaceutical compositions; a method of treating and detecting Chlamydia infection; a diagnostic kit; a method for identifying a protein; expression plasmid pCAI284; the DNA; having a 39 or 29 bp sequence; and general secretion pathway protein-E. The DNAs encoding the Chlamydia general secretion pathway protein-E polypeptides are useful as a **vaccine** in preventing, treating or diagnosing **Chlamydia pneumoniae**. The polynucleotides are used in producing the encoded protein in recombinant host system, in the construction of **vaccine** vectors. The polypeptides are used as diagnostic reagent and in drug screening. (79pp)

L12 ANSWER 21 OF 55 BIOTECHDS COPYRIGHT 2003 THOMSON DERWENT/ISI on STN
AN 2001-08305 BIOTECHDS
TI Novel **Chlamydia pneumoniae** outer membrane protein and polynucleotides encoding, useful as components of **vaccines** for treating Chlamydia infections, and for detecting Chlamydia infections in the body fluids of mammals;
recombinant protein production via plasmid pCAmg002 expression in host cell for gene therapy, nucleic acid, and drug screening
AU Murdin A D; Oomen R P; Wang J; Dunn P
PA Aventis-Pasteur
LO Toronto, Ontario, Canada.
PI WO 2001021804 29 Mar 2001
AI WO 2000-CA1088 15 Sep 2000
PRAI US 1999-154652 20 Sep 1999
DT Patent
LA English
OS WPI: 2001-244939 [25]
AB A protein (I) is claimed. (I) which is a protein having fully defined **Chlamydia pneumoniae** outer membrane protein (OMP) sequence of 568 amino acids (S2), immunogenic fragment of (S2) having 12 consecutive amino acids or the protein which has been modified to improve its immunogenicity and having 75% identity to amino acid sequence. Also

claimed are: a nucleic acid molecule (II); a nucleic acid molecule (III); a nucleic acid molecule (IV); a **vaccine** (V); a pharmaceutical composition; a unicellular host transformed with (II), (III), or (IV); a DNA probe (VI); a DNA primer; a protein encoded by (II) or (IV); a fusion protein (VII); preparation of (I); an antibody (VIII); a **vaccine** (IX); a diagnostic kit; identifying (I) or (VII); expression plasmid pCAm002; and OMP protein from C. pneumoniae. (II), (III), (IV), (VIII) or (IX) or the pharmaceutical compositions are useful for preventing or treating Chlamydia trachomatis, Chlamydia psittaci, **Chlamydia pneumoniae** or Chlamydia pecorum infections. The **vaccine** vectors, (I), (II), (VIII) are useful in the preparation of a medicament. The DNA primers are also useful for detecting Chlamydia sp. in a biological sample. (82pp)

L12 ANSWER 22 OF 55 BIOTECHDS COPYRIGHT 2003 THOMSON DERWENT/ISI on STN
AN 2001-10479 BIOTECHDS
TI New Npt2cp (ADP/ATP translocase) polypeptides and nucleic acids encoding the polypeptides useful for treating, preventing or diagnosing Chlamydia infections, particularly infections caused by **Chlamydia pneumoniae**;
recombinant protein gene production useful in gene therapy and drug screening
AU Murdin A D; Oomen R P; Wang J; Dunn P
PA Aventis-Pasteur
LO Toronto, Ontario, Canada.
PI WO 2001021803 29 Mar 2001
AI WO 2000-CA1087 15 Sep 2000
PRAI US 1999-154326 17 Sep 1999
DT Patent
LA English
OS WPI: 2001-316102 [33]
AB A nucleic acid (I) encoding a protein is claimed. (I) contains a fully defined sequence of 540 amino acids, an immunogenic fragment containing at least 12 consecutive amino acids, or fully defined sequence or an immunogen fragment which has been modified to improve its immunogenicity and which is at least 75% identical to the above sequence. Also claimed are: a **nucleic acid**; **vaccines**; a unicellular host transformed with the nucleic acid; a DNA probe of 5-100 nucleotides or a DNA primer of 10-40 nucleotides; a protein encoded by the DNA; a fusion protein; a method of producing a protein; an antibody against the protein; pharmaceutical compositions; a method of preventing treating or detecting Chlamydia infection; a diagnostic kit; a method for identifying a protein that induces immune response; expression plasmid pCABk663; and DNA having a 42 or 33 bp sequence. The nucleic acids encoding the Chlamydia Npt2cp (ADP/ATP translocase) proteins are useful as a **vaccine** in preventing, treating or diagnosing Chlamydia infection. The polynucleotide may be used in producing the encoded protein in the construction of **vaccine** vectors and in constructing attenuated Chlamydia strains (79pp)

L12 ANSWER 23 OF 55 BIOTECHDS COPYRIGHT 2003 THOMSON DERWENT/ISI on STN
AN 2001-08825 BIOTECHDS
TI Novel **Chlamydia pneumoniae** IpdA protein and polynucleotides encoding them useful as component of **vaccines** for treating Chlamydia infections, and for detecting Chlamydia infection in the body fluid of a mammal;
therapy, gene therapy, recombinant **vaccine** and **nucleic acid vaccine**
AU Murdin A D; Oomen R P; Wang J; Dunn P
PA Aventis-Pasteur
LO Toronto, Ontario, Canada.
PI WO 2001021802 29 Mar 2001
AI WO 2000-CA1086 15 Sep 2000

PRAI US 1999-154325 17 Sep 1999
DT Patent
LA English
OS WPI: 2001-257992 [26]
AB A protein (I) which is a polypeptide fully defined **Chlamydia pneumoniae** lpdA protein (461 amino acids (S2)), an immunogenic fragment of (S2) comprising 12 consecutive amino acids, or a polypeptide based on (S2) which has been modified to improve its immunogenicity, and having 75% identity to (S2) and its fragment. Also claimed are: a nucleic acid molecule (II) comprising a sequence encoding (I); a nucleic acid molecule (III) comprising a sequence antisense to (II); a nucleic acid molecule (IV) comprising a sequence encoding a fusion protein of (I) encoded by (II) and an extra protein; a **vaccine** comprising (I), (II) or (IV) and a **vaccine** vector; a pharmaceutical composition of (II), (III) or (IV); a unicellular host transformed with (II), (III) or (IV), which is linked to one or more expression control sequences; a DNA probe of 5-100 nucleotides hybridizing to C. pneumoniae lpdA (1,586 nucleotides (S1)) or its antisense sequence; a DNA primer; proteins and fusion proteins encoded by the sequences; an antibody; plasmid pCABk892; and lpdA protein. (78pp)

L12 ANSWER 24 OF 55 BIOTECHDS COPYRIGHT 2003 THOMSON DERWENT/ISI on STN
AN 2001-05942 BIOTECHDS
TI New orfF nucleic acids and polypeptides from Chlamydia, useful as a **vaccine** for treating or preventing Chlamydia infections, specifically **Chlamydia pneumoniae**;
Chlamydia pneumoniae recombinant protein gene useful in gene therapy
AU Murdin A D; Oomen R P; Wang J; Dunn P
PA Aventis-Pasteur
LO Toronto, Ontario, Canada.
PI WO 2001002575 11 Jan 2001
AI WO 2000-CA778 28 Jun 2000
PRAI US 1999-141270 30 Jun 1999
DT Patent
LA English
OS WPI: 2001-138144 [14]
AB A nucleic acid (N1) is claimed. (N1) encodes a protein having a fully defined 584 amino acid sequence, an immunogenic fragment containing at least 12 consecutive amino acids of the peptide, or a modified protein which is at least 75% identical to the protein. Also claimed are: a nucleic acid (N2); a nucleic acid containing a sequence, which is an antisense of (I); a **vaccine** (V1) containing at least (N1) or (N2); a unicellular host transformed with the nucleic acid; a DNA probe of 5-1000 nucleotides or a DNA primer of 10-40 nucleotides; a protein encoded by (N1) or (N2) (P1); a protein (P2); producing (P1) or (P2); an antibody (Ab); a **vaccine** (V2); preventing Chlamydia infection; detecting Chlamydia infection; identifying a (P1) or (P2); expression plasmid pCAI236; an orfF protein from Chlamydia. The nucleic acid and its encoded protein are useful as a **vaccine** for preventing, treating or diagnosing Chlamydia infections. The nucleic acid may also be used in producing the encoded protein in a recombinant host; in constructing **vaccine** vector. The proteins are also used in preparation of medicament for treating Chlamydia infection. (79pp)

L12 ANSWER 25 OF 55 CAPLUS COPYRIGHT 2003 ACS on STN
AN 2001:472751 CAPLUS
DN 135:75736
TI Chlamydia membrane ATPase and corresponding DNA fragments and uses thereof
IN Murdin, Andrew D.; Oomen, Raymond P.; Wang, Joe; Dunn, Pamela
PA Aventis Pasteur Limited, Can.
SO PCT Int. Appl., 80 pp.
CODEN: PIXXD2

DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2001046226	A2	20010628	WO 2000-CA1536	20001220
WO 2001046226	A3	20020418		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRAI US 1999-171538P P 19991222

AB The present invention provides a method of nucleic acid, including DNA, immunization of a host, including humans, against disease caused by infection by a strain of Chlamydia, specifically C. pneumoniae, employing a vector contg. a nucleotide sequence encoding a membrane ATPase of a strain of **Chlamydia pneumoniae** and a promoter to effect expression of the membrane ATPase in the host. Modifications are possible within the scope of this invention.

L12 ANSWER 26 OF 55 CAPLUS COPYRIGHT 2003 ACS on STN
AN 2001:380619 CAPLUS
DN 135:4464
TI **DNA vaccine** against **Chlamydia pneumoniae**
IN Murdin, Andrew D.; Oomen, Raymond P.; Wang, Joe; Dunn, Pamela
PA Aventis Pasteur Limited, Can.
SO PCT Int. Appl., 80 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2001036457	A2	20010525	WO 2000-CA1346	20001110
WO 2001036457	A3	20011101		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRAI US 1999-165615P P 19991115

AB The authors disclose an amino acid transporter of **Chlamydia pneumoniae**, which on genetic immunization of mice, provides a protective immune response.

L12 ANSWER 27 OF 55 CAPLUS COPYRIGHT 2003 ACS on STN
AN 2001:366628 CAPLUS
DN 135:4458
TI **DNA vaccine** against Chlamydia infection
IN Brunham, Robert C.
PA University of Manitoba, Can.
SO U.S., 18 pp.
CODEN: USXXAM

AN 2001-02670 BIOTECHDS
TI Nucleic acids encoding a 76 kDa protein from **Chlamydia pneumoniae**, useful for **vaccinating** against Chlamydia infections;
plasmid pCACPNM555a, plasmid pCAI555 and plasmid pCAD76kDa-mediated gene transfer and expression in host cell and antibody for recombinant **vaccine, nucleic acid vaccine** and gene therapy
AU Murdin A D; Oomen R P; Wang J; Dunn P
PA Aventis-Pasteur
LO Toronto, Ontario, Canada.
PI WO 2000066739 9 Nov 2000
AI WO 2000-CA511 3 May 2000
PRAI US 1999-141276 30 Jun 1999; US 1999-132270 3 May 1999
DT Patent
LA English
OS WPI: 2000-687542 [67]
AB Nucleic acids encoding a 76 kDa protein from Chlamydia penumoniae, is new. The nucleic acid and protein have defined nucleotide and protein sequence. Also claimed are: a nucleic acid molecule containing an antisense oligonucleotide; a nucleic acid molecule which encodes a fusion protein; a **vaccine** containing the nucleic acid; a unicellular host transformed with the nucleic acid; a DNA probe; a protein encoded by the nucleic acid; a method for producing the protein; an antibody; a **vaccine** containing the protein; a diagnostic kit containing the nucleic acid, protein and/or antibody; a method for identifying proteins which induce an immune response that prevents or reduces the severity of Chlamydia sp. infections; an expression plasmid selected from plasmid pCACPNM555a, plasmid pCAI555 and plasmid pCAD76kDa; and a 76 kDa protein from Chlamydia sp. The nucleic acid molecule, protein, recombinant **vaccine, nucleic acid vaccine** and antibody may be used for preventing and treating Chlamydia sp. infection by **vaccination** and to detect infection. (90pp)

L12 ANSWER 30 OF 55 BIOTECHDS COPYRIGHT 2003 THOMSON DERWENT/ISI on STN
AN 2001-00991 BIOTECHDS
TI New polynucleotide encoding a 60 kDa cysteine-rich membrane protein from Chlamydia, useful as a **vaccine** for preventing and treating Chlamydia infection in mammals;
method is useful for treating disease
AU Murdin A D; Oomen R P; Wang J; Dunn P
PA Aventis-Pasteur
LO Toronto, Ontario, Canada.
PI WO 2000055326 21 Sep 2000
AI WO 2000-US240 9 Mar 2000
PRAI US 1999-123966 12 Mar 1999
DT Patent
LA English
OS WPI: 2000-618918 [59]
AB A new polynucleotide (I) is claimed. It contains a nucleotide sequence encoding a protein (IV) of a Chlamydia 60,000 cysteine-rich membrane protein. Also claimed are: a nucleic acid molecule (II) containing a nucleic acid sequence which encodes a fusion protein; a **vaccine** (III) containing (I) or (II) and a **vaccine** vector; a unicellular host transformed with (I) or (II); a DNA probe of 5 to 100 nucleotides or a DNA primer of 10-40 nucleotides hybridizing under stringent condition to (I) or its homolog, or complementary sequence; a fusion protein (V) containing (IV) and additional protein; preparation of (IV); an antibody (Ab) specific to (IV) or (V); a pharmaceutical composition (C) containing (I), (II), (III) or (Ab); a diagnostic kit containing instructions for use and (I), (II), (IV) (V) or (Ab); identifying a protein inducing a immune response effective to prevent or immunize the severity of Chlamydia infection in a mammal previously

immunized with a protein; and an expression plasmid pCACRMP60. (I), (IV), a nucleic acid (II), a **vaccine** (III), an antibody, or a pharmaceutical composition is useful for preventing, treating or diagnosing Chlamydia infection. (77pp)

L12 ANSWER 31 OF 55 BIOTECHDS COPYRIGHT 2003 THOMSON DERWENT/ISI on STN
AN 2001-00123 BIOTECHDS
TI Polynucleotides encoding 9 kDa cysteine-rich membrane protein from Chlamydia, useful as a **vaccine** for preventing and treating Chlamydia infection in mammals;
recombinant membrane protein, sense and antisense oligonucleotide, vector plasmid pCACRMP9 and antibody for use in recombinant **vaccine** and **nucleic acid vaccine**
AU Murdin A D; Oomen R P; Wang J; Dunn P
PA Aventis-Pasteur
LO Toronto, Ontario, Canada.
PI WO 2000053764 14 Sep 2000
AI WO 2000-CA239 9 Mar 2000
PRAI US 1999-123968 12 Mar 1999
DT Patent
LA English
OS WPI: 2000-587438 [55]
AB Nucleic acid (NA) (I) encoding a 9kDa cysteine-rich Chlamydia sp. (**Chlamydia pneumoniae**) membrane protein (II) is claimed.
(II) is selected from: a protein with 90 amino acid protein sequence (S1) which is disclosed; an immunogenic fragment of at least 12 consecutive amino acids of (S1); or a protein (S1) or its fragment which has been modified to improve its immunogenicity, where the modified protein is at least 75% identical in protein sequence to the native corresponding (S1) or (S1) fragment sequence. Also claimed are: a NA molecule (N1) comprising a sequence selected from a disclosed 600 bp sequence (S2), a sequence encoding a protein encoded by (S2), a sequence of at least 38 consecutive nucleotides from any one of the disclosed sequences, and a sequence encoding a protein which is at least 75% identical in protein sequence to the proteins encoded by (S1); an antisense oligonucleotide (N2) to (I); NA encoding a fusion protein of (II); a recombinant **vaccine** or **nucleic acid vaccine**; a unicellular host; a DNA probe and DNA primer; an antibody; a diagnosis kit; identifying a protein capable of inducing immune response against Chlamydia sp.; and plasmid pCACRMP9. (68pp)

L12 ANSWER 32 OF 55 BIOTECHDS COPYRIGHT 2003 THOMSON DERWENT/ISI on STN
AN 2000-13607 BIOTECHDS
TI New **Chlamydia pneumoniae** protein of 496 amino acids for diagnosing, preventing and treating C. pneumoniae infection and atherosclorosis, including coronary atherosclerosis;
protein useful for disease therapy
AU Burnie J P; Matthews R C
PA Neutec-Pharma
LO Manchester, UK.
PI WO 2000046359 10 Aug 2000
AI WO 2000-GB237 28 Jan 2000
PRAI GB 1999-2555 5 Feb 1999
DT Patent
LA English
OS WPI: 2000-543485 [49]
AB A new **Chlamydia pneumoniae** protein having an amino acid sequence of 496 amino acids is claimed and is useful for treating or diagnosing C. pneumoniae infection of the human or animal body. Also claimed are: a nucleotide sequence encoding the new protein for treating the human or animal body; manufacturing a medicament for the treatment of infection due to C. pneumoniae using a protein, or immunogenic fragment; manufacturing a medicament for the treatment of infection due to C.

pneumoniae using an inhibitor specific for the new protein; a kit for diagnosing C. pneumoniae containing new protein; diagnosing C. pneumoniae infection; and treating a C. pneumoniae infection by administering to a patient a medicament containing a protein, immunogenic fragment or an inhibitor antibody, **DNA**, **vaccine**, ribozyme, or antisense oligonucleotide). The new protein, immunogenic fragment of it, nucleotide sequence encoding it, or inhibitor specific against it is used to manufacturing a medicament for treatment of infection due to C. pneumoniae. Antibody against the new protein can diagnose a C. pneumonia infection. (35pp)

L12 ANSWER 33 OF 55 BIOTECHDS COPYRIGHT 2003 THOMSON DERWENT/ISI on STN
AN 2000-10019 BIOTECHDS
TI Novel Chlamydia sp. PilG-like protein antigen, used for **vaccination** and protection against Chlamydia sp. infection; recombinant protein production via vector plasmid-mediated gene transfer and expression in transgenic mouse for use as a **nucleic acid vaccine** or recombinant **vaccine**
AU Murdin A D; Oomen R P; Dunn P L
PA Connaught-Lab.
LO Toronto, Ontario, Canada.
PI WO 2000026376 11 May 2000
AI WO 1999-GB3582 29 Oct 1999
PRAI US 1999-428589 27 Oct 1999; US 1998-106071 29 Oct 1998
DT Patent
LA English
OS WPI: 2000-365623 [31]
AB A **Chlamydia pneumoniae** PilG-like protein antigen and a polynucleotide (I) which has a 1,400 bp DNA sequence or encodes a protein with a sequence at least 75% identical to a 391 amino acid protein sequence (both specified), is new. Also claimed are: an isolated protein (II) which is encoded by a sequence with at least 75% identity with a 391 amino acid protein sequence; a DNA cassette which contains (I) operably linked to a promoter; an expression vector containing the DNA cassette; a host cell transformed with the DNA cassette; a method for producing a recombinant protein by culturing the transformed host cells; a **vaccine** vector containing the DNA cassette; a DNA probe/primer for detecting the presence of Chlamydia sp. in a biological material; an affinity chromatography method for purifying (II); and an antibody specific for (II). The above may be useful as nucleic acid and recombinant **vaccines** for immunizing subjects against Chlamydia sp. infections, especially Chlamydia pneumonia infection. Vector plasmid pCAI419 may be used as a **nucleic acid vaccine** against C. pneumonia infection in BALB/c mice. (88pp)

L12 ANSWER 34 OF 55 BIOTECHDS COPYRIGHT 2003 THOMSON DERWENT/ISI on STN
AN 2000-09990 BIOTECHDS
TI Novel Chlamydia POMP91B precursor protein antigen, used for **vaccination** and protection against Chlamydia infection; plasmid pCAI632-mediated gene transfer and expression in host cell, antibody and DNA probe for **Chlamydia pneumoniae** infection therapy, **nucleic acid vaccine** and gene therapy
AU Murdin A D; Oomen R P; Dunn P L
PA Connaught-Lab.
LO Toronto, Ontario, Canada.
PI WO 2000026239 11 May 2000
AI WO 1999-GB3622 2 Nov 1999
PRAI US 1999-430723 29 Oct 1999; US 1998-106590 2 Nov 1998
DT Patent
LA English
OS WPI: 2000-365571 [31]

AB A polynucleotide (3,150 bp) encoding a **Chlamydia pneumoniae** POMP91B precursor antigen (973 amino acids) is new. Also claimed are: the protein; an expression cassette containing the polynucleotide linked to a promoter; an expression vector (e.g. plasmid pCAI632) containing the expression cassette; a host cell; producing the protein; a **nucleic acid vaccine** containing the expression cassette; a DNA probe capable of detecting the presence of Chlamydia sp. in a biological material; detecting the presence of Chlamydia sp.; affinity chromatography purifying the protein; and an antibody. The POMP91B precursor protein and polynucleotide can be used as **vaccines** for immunization, to provide protection against Chlamydia sp. infections, especially **Chlamydia pneumoniae** infections. The **nucleic acid vaccine**, the protein and Chlamydia sp. antigens can be used in the preparation of pharmaceutical compositions. (97pp)

L12 ANSWER 35 OF 55 BIOTECHDS COPYRIGHT 2003 THOMSON DERWENT/ISI on STN
AN 2000-09989 BIOTECHDS
TI Novel Chlamydia 98 kDa putative outer membrane protein antigen, used for **vaccination** and protection against Chlamydia sp. infection.; plasmid pCAI396-mediated gene transfer and expression in host cell and DNA probe for **Chlamydia pneumoniae** infection therapy, **nucleic acid vaccine** and gene therapy
AU Murdin A D; Oomen R P; Dunn P L
PA Connaught-Lab.
LO Ontario, CA, USA.
PI WO 2000026237 11 May 2000
AI WO 1999-GB3579 29 Oct 1999
PRAI US 1999-428122 27 Oct 1999; US 1998-106070 29 Oct 1998
DT Patent
LA English
OS WPI: 2000-365569 [31]
AB A **Chlamydia pneumoniae** 98 kDa putative outer membrane protein antigen (928 amino acids) is new. Also claimed are: a polynucleotide (3,000 bp) encoding the protein; an expression cassette containing the polynucleotide linked to a promoter; an expression vector (e.g. plasmid pCAI396) containing the expression cassette; a host cell; producing the protein; a **nucleic acid vaccine** containing the expression cassette; methods for inducing an immune response in a mammal; a pharmaceutical composition containing an immunologically effective amount of the protein; and a DNA probe reagent (e.g. a DNA primer) capable of detecting the presence of Chlamydia sp. The 98 kDa putative outer membrane protein and polynucleotide are used as **vaccines** for immunization, to provide protection against Chlamydia sp., especially **Chlamydia pneumoniae** infections. (93pp)

L12 ANSWER 36 OF 55 BIOTECHDS COPYRIGHT 2003 THOMSON DERWENT/ISI on STN
AN 2000-09975 BIOTECHDS
TI Isolated polynucleotide encoding a Chlamydia sp. polypeptide useful to treat, diagnose and prevent disease caused by Chlamydia sp. infection; **Chlamydia pneumoniae** recombinant protein production via vector plasmid-mediated gene transfer and expression in host cell for use in **nucleic acid vaccine** and recombinant **vaccine**
AU Murdin A D; Oomen R P; Dunn P L.
PA Connaught-Lab.
LO Toronto, Ontario, Canada.
PI WO 2000024902 4 May 2000
AI WO 1999-GB2571 28 Oct 1999
PRAI US 1999-427533 26 Oct 1999; US 1998-106046 28 Oct 1998
DT Patent

LA English
OS WPI: 2000-350743 [30]
AB An isolated polynucleotide (NI) which encodes an outer membrane protein of a strain of **Chlamydia pneumoniae** with a mol.wt. of 98,000, is new. Also claimed are: an isolated protein (PI) with a sequence which is at least 75% homologous to a 931 amino acid protein sequence (II), that is encoded by the 3,050 bp DNA sequence (I) which encodes (NI); a protein (PII) which consists of (PI) linked to a fusion protein; an expression DNA cassette which consists of (NI) operably linked to a promoter; an expression vector containing the DNA cassette; a host cell transformed with the vector; a method for producing recombinant (PI) involving culturing the transformed host cells; a **vaccine** vector which contains the DNA cassette; a composition containing (PI) and one or more Chlamydia sp. antigens; a DNA probe/primer for detecting Chlamydia sp. in biological material; an affinity chromatography method for purifying (PI); and an antibody specific for (PI). The above may be useful in **nucleic acid vaccines** and recombinant **vaccines** to treat or prevent disease caused by Chlamydia sp. infection. In an example, BALB/c mice were immunized with plasmid DNA via an i.m. injection. (101pp)

L12 ANSWER 37 OF 55 BIOTECHDS COPYRIGHT 2003 THOMSON DERWENT/ISI on STN
AN 2000-09974 BIOTECHDS
TI Isolated polynucleotide encoding a Chlamydia sp. polypeptide useful to treat, diagnose and prevent disease caused by Chlamydia sp. infection; **Chlamydia pneumoniae** recombinant protein production via vector plasmid-mediated lorf2 gene transfer and expression in host cell for **nucleic acid vaccine** and recombinant **vaccine**
AU Murdin A D; Oomen R P; Dunn P L
PA Connaught-Lab.
LO Toronto, Ontario, Canada.
PI WO 2000024901 4 May 2000
AI WO 1999-GB3565 28 Oct 1999
PRAI US 1999-427501 26 Oct 1999; US 1998-106037 28 Oct 1998
DT Patent
LA English
OS WPI: 2000-350742 [30]
AB An isolated polynucleotide (NI) which encodes a lorf2 protein of a strain of **Chlamydia pneumoniae**, is new. Also claimed are: an isolated protein (PI) with a sequence which is at least 75% homologous to a 422 amino acid protein sequence (II), that is encoded by the 1,550 bp DNA sequence (I) which encodes (NI); a protein (PII) which consists of (PI) linked to a fusion protein; an expression DNA cassette which consists of (NI) operably linked to a promoter; an expression vector containing the DNA cassette; a host cell transformed with the vector; a method for producing recombinant (PI) involving culturing the transformed host cells; a **vaccine** vector which contains the DNA cassette; a composition containing (PI) and one or more Chlamydia sp. antigens; a DNA probe/primer for detecting Chlamydia sp. in biological material; an affinity chromatography method for purifying (PI); and an antibody specific for (PI). The above may be useful in **nucleic acid vaccines** and recombinant **vaccines** to treat or prevent disease caused by Chlamydia sp. infection. In an example, BALB/c mice were immunized with plasmid DNA via an i.m. injection. (88pp)

L12 ANSWER 38 OF 55 BIOTECHDS COPYRIGHT 2003 THOMSON DERWENT/ISI on STN
AN 2000-06574 BIOTECHDS
TI Novel antigens and corresponding DNA molecules that can be used to prevent, treat and diagnose disease caused by Chlamydia infection in mammals, especially humans; recombinant **vaccine** and **nucleic acid**

vaccine

AU Murdin A D; Oomen R P
PA Connaught-Lab.
LO Toronto, Ontario, Canada.
PI WO 2000011183 2 Mar 2000
AI WO 1999-IB1449 18 Aug 1999
PRAI US 1999-376770 17 Aug 1999; US 1998-97187 20 Aug 1998
DT Patent
LA English
OS WPI: 2000-224703 [19]
AB Isolated **Chlamydia pneumoniae** proteins (I) encoded by one of the disclosed protein sequences of 147-970 amino acids are claimed. Also claimed are: a polynucleotide (II) encoding a protein having a protein sequence at least 75% homologous to or encoding a protein fragment of (I), where (II) has a disclosed DNA sequence of 650-3,200 bp; a (I) fusion protein encoded by one of the disclosed protein sequences linked to a fusion protein partner; an expression DNA cassette comprising one of the disclosed DNA sequences of (II) operably linked to a promoter; an expression vector comprising the cassette; a host cell transformed with the cassette; production of recombinant (I) involving culturing the transformed host cell to allow (I) expression and recovering (I); a **vaccine** vector containing the DNA cassette; a DNA probe capable of detecting Chlamydia sp. in a biological material, where the probe is a sequence that hybridizes to one of the disclosed (II) sequences; a hybridization method for detecting Chlamydia spp.; an amplification method for detecting Chlamydia spp.; an affinity chromatography method for purifying a Chlamydia sp. antigen; and an antibody specific for (I). (201pp)

L12 ANSWER 39 OF 55 BIOTECHDS COPYRIGHT 2003 THOMSON DERWENT/ISI on STN
AN 2000-06704 BIOTECHDS
TI New nucleic acid encoding POMP91A protein from a strain of Chlamydia useful for preventing, treating and diagnosing Chlamydia infection; plasmid pCAI327 for use as a **nucleic acid vaccine**

AU Murdin A D; Dunn P L; Oomen R P
PA Connaught-Lab.
LO Toronto, Ontario, Canada.
PI WO 2000011180 2 Mar 2000
AI WO 1999-CA765 19 Aug 1999
PRAI US 1998-97198 20 Aug 1998
DT Patent
LA English
OS WPI: 2000-224700 [19]
AB An isolated and purified nucleic acid molecule (I) encoding a POMP91A protein or polypeptide fragment of POMP91A from a strain of Chlamydia sp. (**Chlamydia pneumoniae**) is claimed. Also claimed are: an expression cassette containing (I) under the control of elements required for expression of (I); an expression vector containing the expression cassette; a **vaccine** vector comprising (I) under the control of elements needed for expression of (I); and an antibody that specifically binds to a protein of disclosed 947 amino acid protein sequence or a fragment containing the binding domain of this protein. (I) is used as a **nucleic acid vaccine** for prevention, therapy and diagnosis of Chlamydia sp. infection. **Vaccine** vectors containing (I) are used to induce an immune response against Chlamydia spp. (I) or a monoclonal antibody specific for POMP91A can be used in diagnosis of Chlamydia in a biological sample. Cells transformed or transfected with (I) are disclosed for production of POMP91A. (I) has the disclosed DNA sequence of 3,050 bp or has a sequence complementary to this. The Chlamydia sp. POMP91A gene is disclosed too. The vector is preferably plasmid pCAI327. (98pp)

L12 ANSWER 40 OF 55 BIOTECHDS COPYRIGHT 2003 THOMSON DERWENT/ISI on STN
AN 2000-05943 BIOTECHDS
TI **Chlamydia pneumoniae** antigens used for immunization and protection against Chlamydia diseases; recombinant **vaccine** and **nucleic acid vaccine**
AU Murdin A D; Oomen R P; Dunn P L
PA Connaught-Lab.
LO Toronto, Ontario, Canada.
PI WO 2000006743 10 Feb 2000
AI WO 1999-IB1333 27 Jul 1999
PRAI US 1999-360434 26 Jul 1999; US 1998-94203 27 Jul 1998
DT Patent
LA English
OS WPI: 2000-195303 [17]
AB **Chlamydia pneumoniae** antigens (II), and their corresponding polynucleotides (PNs) (II), are claimed. (I) are found in bacterial membrane structures and its external vicinity, in the inclusion membrane and its external vicinity, and are released into the cytoplasm of the infected cell. (II) is selected from a 961 bp sequence (disclosed), a sequence encoding a protein with a least 75% homology to a 265 amino acid protein sequence (disclosed) or a PN hybridizing under stringent conditions to the 961 bp sequence. Also claimed are: a protein with at least 75% homology to the 237 amino acid sequence; an expression cassette comprising (II) and a promoter; an expression vector containing the cassette; a host cell containing the cassette; producing recombinant CPN100314 protein by culturing the host cell; a **vaccine** vector containing the cassette; a pharmaceutical composition of (II) and one or more known Chlamydia sp. antigens; a **nucleic acid vaccine** and method for **vaccination**; a DNA probe or DNA primer for detecting Chlamydia spp.; a hybridization method; an amplification method; an antibody specific for (I); and purification of CPN100314 by affinity chromatography. (52pp)

L12 ANSWER 41 OF 55 BIOTECHDS COPYRIGHT 2003 THOMSON DERWENT/ISI on STN
AN 2000-06564 BIOTECHDS
TI **Chlamydia pneumoniae** antigens used for immunization and protection against Chlamydia diseases; such as community acquired pneumonia and upper respiratory tract infections such as bronchitis and sinusitis
AU Murdin A D; Oomen R P
PA Connaught-Lab.
LO Toronto, Ontario, Canada.
PI WO 2000006742 10 Feb 2000
AI WO 1999-IB1331 27 Jul 1999
PRAI US 1999-361443 26 Jul 1999; US 1998-94195 27 Jul 1998
DT Patent
LA English
OS WPI: 2000-205466 [18]
AB **Chlamydia pneumoniae** antigens, and their corresponding polynucleotides (I), are claimed. Also claimed are: an isolated protein; an expression cassette (EC) comprising (I); an expression vector, a host cell and a **vaccine** vector comprising the EC; production of a recombinant CPN100605 protein; induction of an immune response in a mammal; a polynucleotide probe reagent; a hybridization, an amplification and an affinity chromatography method; and an antibody that immunospecifically binds the protein of (I). The C. pneumoniae polynucleotides and proteins can be used in **vaccination** methods for preventing and treating Chlamydia infection. The polynucleotides can be used to produce the proteins recombinantly, in the construction of **vaccine** vectors, as a **vaccine** agent, and in the construction of an attenuated Chlamydia strain. The proteins are also useful as **vaccine** agents and for

the preparation of medicaments for treating or preventing Chlamydia infection, e.g. community acquired pneumonia and upper respiratory tract infections such as bronchitis and sinusitis. (48pp)

L12 ANSWER 42 OF 55 BIOTECHDS COPYRIGHT 2003 THOMSON DERWENT/ISI on STN
AN 2000-05942 BIOTECHDS
TI New polynucleotides and **Chlamydia pneumoniae** outer membrane protein encoded by them for use as **vaccines** in treating and diagnosing chlamydial infections;
recombinant **vaccine** and **nucleic acid vaccine**
AU Murdin A D; Oomen R P; Dunn P L
PA Connaught-Lab.
LO Toronto, Ontario, Canada.
PI WO 2000006741 10 Feb 2000
AI WO 1999-IB1330 27 Jul 1999
PRAI US 1999-361440 26 Jul 1999; US 1998-94192 27 Jul 1998
DT Patent
LA English
OS WPI: 2000-195302 [17]
AB **Chlamydia pneumoniae** outer membrane protein antigens (mpi or CPN100501 of 258 amino acid protein sequence) (II), and their corresponding polynucleotides (PNs) (II) (960 bp), are claimed. Also claimed are: PNs capable of hybridizing to the 960 bp sequence and their functional fragments. Also claimed are: a protein with at least 75% homology to the 249 amino acid sequence or a fragment; an expression cassette comprising (II); an expression vector and a transformed host cell; producing recombinant CPN100501 protein by culturing the host cell and recovering the protein; a **vaccine** vector containing the cassette; a pharmaceutical composition of (II) and one or more known Chlamydia sp. antigens; a **nucleic acid vaccine** and method for **vaccination**; a DNA probe or DNA primer for detecting Chlamydia spp.; a hybridization method; an antibody specific for (I); and purification of CPN100501 by affinity chromatography. (52pp)

L12 ANSWER 43 OF 55 BIOTECHDS COPYRIGHT 2003 THOMSON DERWENT/ISI on STN
AN 2000-06563 BIOTECHDS
TI Novel **Chlamydia pneumoniae** antigens used for immunization and protection against Chlamydia diseases;
such as community acquired pneumonia and upper respiratory tract infections such as bronchitis and sinusitis
AU Murdin A D; Oomen R P
PA Connaught-Lab.
LO Toronto, Ontario, Canada.
PI WO 2000006740 10 Feb 2000
AI WO 1999-IB1329 27 Jul 1999
PRAI US 1999-361040 26 Jul 1999; US 1998-94191 27 Jul 1998
DT Patent
LA English
OS WPI: 2000-205465 [18]
AB **Chlamydia pneumoniae** antigens and their corresponding polynucleotides (I), are claimed. These polynucleotides are found in the bacterial membrane structure and its external vicinity and are released into the cytoplasm of the infected cell. Also claimed are: an isolated protein; an expression cassette (EC) comprising (I); an expression vector, a host cell and a **vaccine** vector comprising the EC; production of a recombinant CPN100149 protein; induction of an immune response in a mammal; a polynucleotide probe reagent; a hybridization, an amplification and an affinity chromatography method; and an antibody that immunospecifically binds the protein of (I). The C. pneumoniae polynucleotides and proteins can be used in **vaccination** methods for preventing and treating Chlamydia infection. The polynucleotides can

General Review; (Literature Review)
LA English
ED Entered STN: 16 Aug 2000
Last Updated on STN: 7 Jan 2002
AB Chlamydia trachomatis and **Chlamydia pneumoniae** appear to share a common immunobiology with about 80% of their protein coding genes being orthologs. Progress in **DNA vaccine** development for C. trachomatis suggests that such a subunit approach may prove useful for C. pneumoniae. The recent finding that it is possible to select for chlamydiae with targeted mutations in key metabolic genes together with the new knowledge of the chlamydia genome also suggests that it may be possible to develop live attenuated strains of chlamydiae for use as **vaccine**.

L12 ANSWER 48 OF 55 EMBASE COPYRIGHT 2003 ELSEVIER INC. ALL RIGHTS RESERVED. on STN
AN 2000225592 EMBASE
TI The potential for **vaccine** development against chlamydial infection and disease.
AU Brunham R.C.; Zhang D.J.; Yang X.; McClarty G.M.
CS Dr. R.C. Brunham, University of British Columbia, Centre for Disease Control, 655 W. 12th Ave., Vancouver, BC V5Z 4R4, Canada
SO Journal of Infectious Diseases, (2000) 181/6 SUPPL. 3 (S538-S543). Refs: 47
ISSN: 0022-1899 CODEN: JIDIAQ
CY United States
DT Journal; Conference Article
FS 004 Microbiology
026 Immunology, Serology and Transplantation
LA English
SL English
AB Chlamydia trachomatis and **Chlamydia pneumoniae** appear to share a common immunobiology with about 80% of their protein coding genes being orthologs. Progress in **DNA vaccine** development for C. trachomatis suggests that such a subunit approach may prove useful for C. pneumoniae. The recent finding that it is possible to select for chlamydiae with targeted mutations in key metabolic genes together with the new knowledge of the chlamydia genome also suggests that it may be possible to develop live attenuated strains of chlamydiae for use as **vaccine**.

L12 ANSWER 49 OF 55 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN DUPLICATE 3
AN 2000:230361 BIOSIS
DN PREV200000230361
TI Protective DNA immunization against **Chlamydia pneumoniae**
AU Svanholm, C.; Bandholtz, L.; Castanos-Velez, E.; Wigzell, H.; Rottenberg, M. E. [Reprint author]
CS Microbiology and Tumour Biology Center, Karolinska Institute, S-171 77, Stockholm, Sweden
SO Scandinavian Journal of Immunology, (April, 2000) Vol. 51, No. 4, pp. 345-353. print.
CODEN: SJIMAX. ISSN: 0300-9475.
DT Article
LA English
ED Entered STN: 7 Jun 2000
Last Updated on STN: 5 Jan 2002
AB We have investigated the efficacy of the **DNA vaccination** using the heat shock protein 60 (HSP-60) gene of C. pneumoniae, for protection of mice against infection with the bacteria. C57B1/6 mice had a 5-20-fold reduction of C. pneumoniae numbers in lungs when immunized intranasally (i.n.) with plasmids (p) encoding pHSP-60. The reduction of

the bacterial load coincided with a decreased severity of disease. No specific antibodies were detected after protective i.n. immunization. In contrast, mice immunized intradermally (i.d.) were not protected against challenge with C. pneumoniae, although specific humoral Immunoglobulin (Ig)G responses were generated. Co-inoculation i.n. of pHSP-60 with pIL-12 but not with pGM-CSF further increased protection of mice against infection with C. pneumoniae. Lungs from pHSP-60 i.n. immunized and infected mice showed higher levels of interferon (IFN)-gamma mRNA, and spleen cells from these mice co-cultured with r-HSP-60 released higher levels of IFN-gamma and displayed higher proliferative responses than nonimmunized and infected controls. pHSP-60 immunized IFN-gamma receptor (R)-/- mice were not protected against infection with C. pneumoniae. Likewise, i.n. administration of pIFN-gamma alone induced significant protection. **DNA vaccine**-induced protection was CD4+ and CD8+ T-cell dependent, as shown by **DNA-vaccination** of MHC class II-/-, CD4-/-, CD8-/- and CD4-/- CD8-/-mice. Interestingly, **DNA vaccine** induced CD4+ T cells, in the absence of CD8+ T cells, were involved in worsening the outcome of infection. This worsening was linked with a shift towards a Th2 cytokine pattern.

L12 ANSWER 50 OF 55 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
AN 2000:205237 BIOSIS
DN PREV200000205237
TI Recent advances in the study, prevention, and treatment of infectious diseases.
AU Huang, Li-Min [Reprint author]
CS Department of Pediatrics, National Taiwan University Hospital, 7 Chung-Shan South Road, Taipei, Taiwan
SO Journal of the Formosan Medical Association, (Feb., 2000) Vol. 99, No. 2, pp. 92-99. print.
ISSN: 0929-6646.
DT Article
General Review; (Literature Review)
LA English
ED Entered STN: 24 May 2000
Last Updated on STN: 5 Jan 2002
AB Along with the rapid progress in molecular biology and computer technology, many changes have occurred in the diagnosis, treatment, prevention, and understanding of infectious diseases. Molecular techniques are taking a more important role both in the diagnosis and in the discovery of etiologic agents. The associations of Helicobacter pylori with gastroduodenal disorders and **Chlamydia pneumoniae** with atherogenesis have revised contemporary thinking about the pathogenesis of chronic organ and tissue diseases. **Vaccination**, once a privilege of children, is now being used in adults and is also being tried as a therapeutic modality for chronic diseases. Acquired immunodeficiency syndrome (AIDS) has become pandemic and its toll is devastating. The study of AIDS has not only benefited patients living with human immunodeficiency virus (HIV) infection, but has also delivered a strong boost to antiviral research. Structure-based drug design was proven useful through the successful development of HIV protease inhibitors and an influenza neuraminidase inhibitor. In the future, the integration of structure-based drug design and combinatorial chemistry should expedite the pace of new drug development. Finally, dissection of human genes related to susceptibility to infectious diseases is a task to be completed in our fight against infectious microorganisms.

L12 ANSWER 51 OF 55 BIOTECHDS COPYRIGHT 2003 THOMSON DERWENT/ISI on STN
AN 1999-10404 BIOTECHDS
TI Genome sequence of **Chlamydia pneumoniae**; recombinant **vaccine**, **nucleic acid vaccine** and DNA chip
AU Griffais R

PA Genset
LO Paris, France.
PI WO 9927105 3 Jun 1999
AI WO 1998-IB1890 20 Nov 1998
PRAI US 1998-107078 4 Nov 1998; US 1997-14673 21 Nov 1997
DT Patent
LA English
OS WPI: 1999-357842 [30]
AB The genome sequence (I) of **Chlamydia pneumoniae** and open reading frames obtained by analysis of the sequence are claimed. The DNA sequence of (I) having 1,230,025 bp is disclosed and is deposited with the ATCC. Also claimed are: DNA sequences with at least 99.9% or at least 80% homology to (I); sequences hybridizing under high or intermediate stringency with the claimed sequences; a polynucleotide encoding an open reading frame from C. pneumoniae genome; ORF2 to ORF1297 sequences; a polynucleotide (I') encoding a fusion protein (FP) of one of the ORFs; a recombinant vector that contains (I) or a sequence encoding the FP; a transformed host cell containing (I) or (I'); producing the recombinant protein (II) or FP; the FP or (II); an antibody specific for (II); detection and/or identification of C. pneumoniae in a sample involving using (I) as DNA primer in polymerase chain reaction or use of the antibody to detect (II); a DNA chip containing an array of polynucleotides comprising at least 1 sequence (I); a protein chip comprising an array of proteins; screening assays and kits. (I) and (II) can be used in recombinant **vaccines** and **nucleic acid vaccines**, respectively. (1910pp)

L12 ANSWER 52 OF 55 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN DUPLICATE 4
AN 1998-159277 [14] WPIDS
DNC C1998-051363
TI Preventing or delaying atherosclerosis or restenosis - by combating infection by cytomegalovirus and/or **Chlamydia pneumoniae** , by administration of protein or **DNA vaccine** or antimicrobial agent.
DC B04 D16
IN BERENCSI, K; GONCZOL, E
PA (WIST-N) WISTAR INST ANATOMY & BIOLOGY; (BERE-I) BERENCSI K; (GONC-I) GONCZOL E
CYC 23
PI WO 9806408 A1 19980219 (199814)* EN 53p
RW: AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE
W: AU CA HU JP
AU 9739843 A 19980306 (199830)
EP 964686 A1 19991222 (200004) EN
R: AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE
HU 9903964 A2 20000328 (200025)
JP 2000516617 W 20001212 (200101) 46p
AU 728285 B 20010104 (200107)
AU 2001023031 A 20010524 (200139)#
US 6291437 B1 20010918 (200157)
US 2001029251 A1 20011011 (200162)
ADT WO 9806408 A1 WO 1997-US14443 19970814; AU 9739843 A AU 1997-39843 19970814; EP 964686 A1 EP 1997-937292 19970814, WO 1997-US14443 19970814; HU 9903964 A2 WO 1997-US14443 19970814, HU 1999-3964 19970814; JP 2000516617 W WO 1997-US14443 19970814, JP 1998-510083 19970814; AU 728285 B AU 1997-39843 19970814; AU 2001023031 A Div ex AU 1997-39843 19970814, AU 2001-23031 20010216; US 6291437 B1 Provisional US 1996-23404P 19960814, US 1997-911299 19970814; US 2001029251 A1 Provisional US 1996-23404P 19960814, Cont of US 1997-911299 19970814, US 2001-859242 20010517
FDT AU 9739843 A Based on WO 9806408; EP 964686 A1 Based on WO 9806408; HU 9903964 A2 Based on WO 9806408; JP 2000516617 W Based on WO 9806408; AU 728285 B Previous Publ. AU 9739843, Based on WO 9806408; AU 2001023031 A Div ex AU 728285

PRAI US 1996-23404P 19960814; AU 2001-23031 20010216; US 1997-911299 19970814; US 2001-859242 20010517

AB WO 9806408 A UPAB: 19980406

Use of HCMV (human cytomegalovirus) protein (I) to prevent or retard development of atherosclerotic lesions or restenosis in a mammal is new.

(I) is administered to induce cell-mediated and/or antibody response to HCMV.

Also claimed are:

(1) a similar use of nucleic acid (II) encoding (I);

(2) A similar use of immunogenic **Chlamydia pneumoniae** protein (III), or its fragments, or nucleic acid (IV) encoding (III), and

(3) composition containing antimicrobial (V) effective against C. pneumoniae or antiviral against HCMV for the same purpose.

USE - The method is particularly used to **vaccinate** children or immuno-compromised subjects (e.g. patients receiving transplants, blood transfusions or immunosuppressive treatment) and to prevent restenosis after atherectomy or balloon angioplasty; to avoid transmission of CMV to a foetus, or generally to treat any existing or anticipated injury to an artery.

The methods are based on the idea that infection with HCMV and/or C. pneumoniae is involved in development of atherosclerosis by damaging intimal cells.

Dwg.0/4

L12 ANSWER 53 OF 55 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN

AN 1999-105610 [09] WPIDS

DNC C1999-031445

TI Species-specific test for identifying mammals infected with **Chlamydia pneumoniae** - comprises detecting antibodies specific for outer membrane proteins of C. pneumoniae or nucleic acids encoding these proteins.

DC B04 D16

IN BIRKELUND, S; CHRISTIANSEN, G; KNUDSEN, K; MYGIND, P; PEDERSEN, A H; HEBSGAARD PEDERSEN, A; MADSEN, A

PA (BIRK-I) BIRKELUND S; (CHRI-I) CHRISTIANSEN G; (LOKE-N) LOKE DIAGNOSTICS APS

CYC 83

PI WO 9858953 A2 19981230 (199909)* EN 115p

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW

W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM GW HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZW

AU 9880119 A 19990104 (199921)

EP 1007685 A2 20000614 (200033) EN

R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

BR 9810288 A 20000919 (200050)

CN 1261403 A 20000726 (200057)

JP 2002510970 W 20020409 (200227) 154p

AU 749382 B 20020627 (200254)

ADT WO 9858953 A2 WO 1998-DK266 19980619; AU 9880119 A AU 1998-80119 19980619; EP 1007685 A2 EP 1998-928179 19980619, WO 1998-DK266 19980619; BR 9810288 A BR 1998-10288 19980619, WO 1998-DK266 19980619; CN 1261403 A CN 1998-806428 19980619; JP 2002510970 W WO 1998-DK266 19980619, JP 1999-503613 19980619; AU 749382 B AU 1998-80119 19980619

FDT AU 9880119 A Based on WO 9858953; EP 1007685 A2 Based on WO 9858953; BR 9810288 A Based on WO 9858953; JP 2002510970 W Based on WO 9858953; AU 749382 B Previous Publ. AU 9880119, Based on WO 9858953

PRAI DK 1997-744 19970623

AB WO 9858953 A UPAB: 19990302

Species specific test for identifying mammals infected with

Chlamydia pneumoniae is new. The test comprises detecting antibodies specific for 56.1 kDa or 89.6 - 100.3 kDa outer membrane proteins of C. pneumoniae, or detecting nucleic acid fragments encoding these proteins. Also claimed are: (A) nucleic acid fragments (N1) - (N12) (including fragments with 50 % homology to these sequences) derived from **Chlamydia pneumoniae**; (B) proteins (P1) - (P12) encoded by fragments (N1) - (N12), respectively or variants having at least 50% sequence similarity and similar biological function; and (C) polyclonal antibodies that specifically bind to proteins (P1) - (P12) or their variants.

USE - The proteins, antibodies and nucleic acid fragments form a diagnostic kit in the detection of mammalian infection by C. pneumoniae (claimed), which is a human respiratory pathogen. The protein is also used in the diagnosis of C. pneumoniae infection in mammals (claimed). Both the nucleic acid fragments and the proteins are used in the immunization (where the protein can be used by itself or as a composition) of mammals against C. pneumoniae (claimed). The nucleic acid fragments are particularly useful as **DNA vaccines** for effecting in vivo expression of antigens in immunization. The **vaccines** produced may also prevent atherosclerosis and bronchial asthma, which are possibly associated with C. pneumoniae.

ADVANTAGE - The species-specific nature of the test, using PCR, enables a sensitive and specific diagnosis of acute, and chronic respiratory tract infections caused by C. pneumoniae.

Dwg.0/21

L12 ANSWER 54 OF 55 BIOTECHDS COPYRIGHT 2003 THOMSON DERWENT/ISI on STN
AN 1998-04462 BIOTECHDS
TI Immunogen for protection against Chlamydia contains non-replicative vector;
nucleic acid vaccine
AU Brunham R C
PA Univ.Manitoba
LO Winnipeg, Manitoba, Canada.
PI WO 9802546 22 Jan 1998
AI WO 1997-CA500 11 Jul 1997
PRAI US 1996-21607 12 Jul 1996
DT Patent
LA English
OS WPI: 1998-110593 [10]
AB An immunogenic composition for generating a protective response to a major outer membrane protein (MOMP) of Chlamydia sp. involves, an adjuvant, a non-replicating vector (A) containing (i) a sequence (I) encoding MOMP or its immunogenic fragment and (ii) a coupled promoter. The compositions are used as **nucleic acid vaccines** for protecting humans against Chlamydia, strains that cause lung diseases, specifically Chlamydia trichomatis, but also **Chlamydia pneumoniae**. The compositions induce a cellular immune response and a recall response following exposure to wild-type Chlamydia spp. They are also used to raise antibodies against MOMP. Immunization with (I) gives significant protection against lung challenge, better than that achieved with recombinant MOMP or synthetic peptides. The response may be amplified by co-administration of DNA encoding immunostimulatory cytokines and use of several genes for Chlamydia spp. antigens or MOMP genes from several different strains may increase the level of protection. The promoter is cytomegalo virus and the vector is plasmic pcDNA3. (A) may be administered by lipofection. (41pp)

L12 ANSWER 55 OF 55 EMBASE on STN
AN 97097070 EMBASE
DN 1997097070

TI [Community acquired infectious diseases].
LES MALADIES INFECTIEUSES COMMUNAUTAIRES.
AU Christmann D.; Hansmann Y.; Staub-Schmidt T.
CS D. Christmann, Serv. des Mal. Infect. et Tropicales, Hopital Civil, Hopitaux Universitaires, 1 Place de l'Hopital, F-67091 Strasbourg Cedex, France
SO Medecine et Maladies Infectieuses, (1997) 27/1 (14-17).
Refs: 30
ISSN: 0399-077X CODEN: MMAIB5
CY France
DT Journal; General Review
FS 004 Microbiology
037 Drug Literature Index
LA French
SL English; French
AB As in the past, community acquired infectious diseases are still a matter of interest. The development of resistance among common pathogens such as Streptococcus pneumoniae and Escherichia coli has increased. The responsability of other pathogens like **Chlamydia pneumoniae**, Helicobacter pylori or Campylobacter jejuni, has been better defined in specific situations. New pathogens have been recognized, such as Ehrlichia or Bartonella, with the help of molecular biology. Some diseases, like tuberculosis, are still not under control. Prevention remains important to control community acquired infectious diseases. The development of **vaccination** programs is essential.

=> d his

(FILE 'HOME' ENTERED AT 16:36:59 ON 28 OCT 2003)

FILE 'BIOSIS, MEDLINE, AGRICOLA, EMBASE, CABA, WPIDS, JAPIO, BIOTECHDS, LIFESCI, CAPLUS' ENTERED AT 16:37:16 ON 28 OCT 2003

```
                E MURDIN ANDREW D/AU
L1          100 S E1-E4
                E OOMEN RAYMOND P/AU
L2           88 S E1-E4
                E WANG JOE/AU
L3           37 S E3-E5
L4          149 S L1-L3
L5           70 S L4 AND CHLAMYDIA?
L6           59 S L5 AND VACCIN?
L7           54 DUP REM L6 (5 DUPLICATES REMOVED)
L8            3 S L7 AND (DNA VACCIN? OR NUCLEIC ACID VACCIN?)
L9         9649 S CHLAMYDIA PNEUMONIAE
L10         481 S L9 AND VACCIN?
L11          65 S L10 AND (DNA VACCIN? OR NUCLEIC ACID VACCIN?)
L12          55 DUP REM L11 (10 DUPLICATES REMOVED)

=> s l10 and (antigen or protein or peptide)
L13        334 L10 AND (ANTIGEN OR PROTEIN OR PEPTIDE)

=> s l13 and immunogenic fragment
L14         38 L13 AND IMMUNOGENIC FRAGMENT

=> dup rem l14
PROCESSING COMPLETED FOR L14
L15          26 DUP REM L14 (12 DUPLICATES REMOVED)

=> d bib ab 1-26

L15   ANSWER 1 OF 26  BIOTECHDS COPYRIGHT 2003 THOMSON DERWENT/ISI on STN
AN    2003-09015  BIOTECHDS
```

Chlamydia. Probes/primers for diagnostic use are also provided.

L20 ANSWER 91 OF 126 CAPLUS COPYRIGHT 2003 ACS on STN
AN 2000:291072 CAPLUS
DN 132:307249
TI Chlamydia antigens and corresponding DNA fragments and their uses for diagnosis and treatment of Chlamydia infection
IN Murdin, Andrew D.; Oomen, Raymond P.; Wang, Joe
PA Connaught Laboratories Limited, Can.
SO PCT Int. Appl., 226 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000024765	A2	20000504	WO 1999-CA992	19991028
	WO 2000024765	A3	20001109		
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	EP 1129202	A2	20010905	EP 1999-955602	19991028
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	JP 2002530052	T2	20020917	JP 2000-578335	19991028
PRAI	US 1998-106034P	P	19981028		
	US 1998-106039P	P	19981028		
	US 1998-106042P	P	19981028		
	US 1998-106044P	P	19981028		
	US 1998-106072P	P	19981029		
	US 1998-106073P	P	19981029		
	US 1998-106074P	P	19981029		
	US 1998-106087P	P	19981029		
	US 1998-106587P	P	19981102		
	US 1998-106588P	P	19981102		
	US 1998-106589P	P	19981102		
	US 1998-107034P	P	19981102		
	US 1998-107035P	P	19981102		
	WO 1999-CA992	W	19991028		

AB The present invention provides purified and isolated polynucleotide mols. that encode 13 **Chlamydia pneumoniae** polypeptides which can be used in methods to prevent, treat, and diagnose Chlamydia infection. The nucleotide and deduced amino acid sequences of the 13 genes and proteins are provided.

L20 ANSWER 92 OF 126 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 48
AN 2001:94048 BIOSIS
DN PREV200100094048
TI Immunity to **Chlamydia pneumoniae** induced by **vaccination** with DNA vectors expressing a cytoplasmic protein (Hsp60) or outer membrane proteins (MOMP and Omp2).
AU Penttila, Tuula [Reprint author]; Vuola, Jenni M.; Puurula, Vuokko; Anttila, Marjukka; Sarvas, Matti; Rautonen, Nina; Makela, P. Helena; Puolakkainen, Mirja
CS Department of Virology, Haartman Institute, University of Helsinki, FIN-00014, Helsinki, Finland

tuula.penttila@helsinki.fi
SO Vaccine, (8 December, 2000) Vol. 19, No. 9-10, pp. 1256-1265. print.
CODEN: VACCDE. ISSN: 0264-410X.
DT Article
LA English
ED Entered STN: 21 Feb 2001
Last Updated on STN: 12 Feb 2002
AB Immune responses induced by intramuscular DNA immunization with **Chlamydia pneumoniae** genes coding for the major outer membrane protein (MOMP), cysteine-rich outer membrane protein 2 (Omp2) or the heat shock protein 60 (Hsp60) were studied. BALB/c mice were **vaccinated** intramuscularly three times at 3-week intervals and challenged intranasally 2 weeks after the last injection. Immunization with pmomp or phsp60 showed 1.2-1.5 log reduction in the mean lung bacterial counts after the challenge. Specific **antibodies** were detected only in sera of the mice immunized with pomp2 and phsp60. Although immunization with pomp2 resulted in a strong serum **antibody** response against Omp2 protein, it failed to protect the mice. Immunization with any of the three **vaccines** did not reduce the severity of histologically assessed pneumonia, but resulted in significantly higher lymphoid reaction in the lung indicating immunological memory.

L20 ANSWER 93 OF 126 EMBASE COPYRIGHT 2003 ELSEVIER INC. ALL RIGHTS RESERVED. on STN
AN 2000287431 EMBASE
TI Questions and answers from the F.I.X..
AU Cada D.J.
CS . dcada@drug-facts.com
SO Hospital Pharmacy, (2000) 35/8 (817-821).
ISSN: 0018-5787 CODEN: HOPHAZ
CY United States
DT Journal; General Review
FS 006 Internal Medicine
018 Cardiovascular Diseases and Cardiovascular Surgery
024 Anesthesiology
037 Drug Literature Index
039 Pharmacy
LA English
SL English
AB The Formulary Information Exchange (The F.I.X.) is an online drug information service available to subscribers of The Formulary Monograph Service. In this column, we present samples of recent dialog on The F.I.X.

L20 ANSWER 94 OF 126 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 49
AN 2000:349566 BIOSIS
DN PREV200000349566
TI Potential relevance of **Chlamydia pneumoniae** surface proteins to an effective **vaccine**.
AU Christiansen, Gunna [Reprint author]; Pedersen, Anna-Sofie; Hjerno, Karin; Vandahl, Brian; Birkelund, Svend
CS Dept. of Medical Microbiology and Immunology, University of Aarhus, Bartholin Bldg., DK 8000, Aarhus C, Denmark
SO Journal of Infectious Diseases, (June, 2000) Vol. 181, No. Supplement 3, pp. S528-S537. print.
CODEN: JIDIAQ. ISSN: 0022-1899.
DT Article
LA English
ED Entered STN: 16 Aug 2000
Last Updated on STN: 7 Jan 2002
AB The surface of **Chlamydia pneumoniae** is covered with proteins but their exact identification is not known probably because of

load coincided with a decreased severity of disease. No specific **antibodies** were detected after protective i.n. immunization. In contrast, mice immunized intradermally (i.d.) were not protected against challenge with C. pneumoniae, although specific humoral Immunoglobulin (Ig)G responses were generated. Co-inoculation i.n. of pHSP-60 with pIL-12 but not with pGM-CSF further increased protection of mice against infection with C. pneumoniae. Lungs from pHSP-60 i.n. immunized and infected mice showed higher levels of interferon (IFN)-gamma mRNA, and spleen cells from these mice co-cultured with r-HSP-60 released higher levels of IFN-gamma and displayed higher proliferative responses than nonimmunized and infected controls. pHSP-60 immunized IFN-gamma receptor (R)-/- mice were not protected against infection with C. pneumoniae. Likewise, i.n. administration of pIFN-gamma alone induced significant protection. DNA **vaccine**-induced protection was CD4+ and CD8+ T-cell dependent, as shown by DNA-**vaccination** of MHC class II-/-, CD4-/-, CD8-/- and CD4-/- CD8-/-mice. Interestingly, DNA **vaccine** induced CD4+ T cells, in the absence of CD8+ T cells, were involved in worsening the outcome of infection. This worsening was linked with a shift towards a Th2 cytokine pattern.

L20 ANSWER 97 OF 126 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN DUPLICATE 51
AN 1999-357842 [30] WPIDS
DNN N1999-266397 DNC C1999-105918
TI Genome sequence of **Chlamydia pneumoniae**.
DC B04 D16 P14 S03
IN FLETCHER, L D; GRIFFAIS, R; HOISETH, S K; METCALF, B J; PEEK, J A; SANKARAN, B; ZAGURSKY, R J
PA (GEST) GENSET; (GEST) GENSET SA
CYC 83
PI WO 9927105 A2 19990603 (199930)* EN
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW
W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZW
AU 9911702 A 19990615 (199944)
EP 1032674 A2 20000906 (200044) EN
R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE
BR 9814878 A 20001003 (200053)
CN 1279717 A 20010110 (200128)
KR 2001032336 A 20010416 (200163)
JP 2002536958 W 20021105 (200304)
US 6559294 B1 20030506 (200338)
AU 762606 B 20030626 (200353)
ADT WO 9927105 A2 WO 1998-IB1890 19981120; AU 9911702 A AU 1999-11702 19981120; EP 1032674 A2 EP 1998-954662 19981120, WO 1998-IB1890 19981120; BR 9814878 A BR 1998-14878 19981120, WO 1998-IB1890 19981120; CN 1279717 A CN 1998-811378 19981120; KR 2001032336 A KR 2000-705552 20000520; JP 2002536958 W WO 1998-IB1890 19981120, JP 2000-556579 19981120; US 6559294 B1 US 1998-198452 19981123; AU 762606 B AU 1999-11702 19981120
FDT AU 9911702 A Based on WO 9927105; EP 1032674 A2 Based on WO 9927105; BR 9814878 A Based on WO 9927105; JP 2002536958 W Based on WO 9927105; AU 762606 B Previous Publ. AU 9911702, Based on WO 9927105
PRAI US 1998-107078P 19981104; FR 1997-14673 19971121
AB WO 9927105 A UPAB: 19990802
NOVELTY - Genome sequence of **Chlamydia pneumoniae** and open reading frames obtained by analysis of the sequence.
DETAILED DESCRIPTION - An isolated polynucleotide (I) having a nucleotide sequence of a **Chlamydia pneumoniae** genome, comprising:
(a) the nucleotide sequence (I) 1230025 bp sequence given in the

specification ;

(b) the nucleotide sequence contained within the **Chlamydia pneumoniae** genomic DNA in ATCC Deposit No (deposit number left blank in the specification).

(c) the nucleotide sequence contained in a clone insert in ATCC Deposit No (no deposit number left blank in the specification);

(d) a nucleotide sequence exhibiting at least 99.9% identity with the 1230025 bp sequence;

(e) a nucleotide sequence exhibiting at least 80% homology to the 1230025 bp sequence;

(f) sequences that hybridize under high or intermediatte stringency with sequences as in (a)-(e);

INDEPENDENT CLAIMS are included for:

(1) an isolated polynucleotide having a nucleotide sequence of an open reading frame (ORF) of a **Chlamydia pneumoniae** genome, comprising:

(a) a nucleotide sequence chosen from one of ORF2 to ORF 1297 (sequences given in the specification);

(b) a nucleotide sequence exhibiting at least 99.9% identity with one of ORF2 to ORF 1297; or

(c) a nucleotide sequence exhibiting at least 80% homology to one of ORF2 to ORF 1297;

(d) sequences that hybridize to sequences as in (a)-(c) under high or intermediatte specificity;

(2) a polynucleotide encoding a fusion protein, comprising one of ORF2 to ORF1297 as in (1) ligated in frame to a polynucleotide encoding a heterologous polypeptide;

(3) a recombinant vector that contains the polynucleotide (I) or as in (1) or (2);

(4) a genetically engineered host cell that contains the polynucleotide (I) or as in (1) or (2);

(5) a method of producing a polypeptide;

(6) a polypeptide encoded by the sequence (I) or as in (1) or (2);

(7) an **antibody** that immunospecifically binds to the polypeptide as in (6);

(8) a method for the detection and/or identification of **Chlamydia pneumoniae** in a biological sample, comprising:

(1) using the sequence (I) or as in (1) or(2) as primers in a PCR protocol;

(2) using the **antibody** as in (7) to detect the proteins of **Chlamydia pneumoniae**;

(9) a DNA chip containing an array of polynucleotides comprising at least one of the polynucleotides (I) or as in (1) or (2);

(10) a protein chip containing an array of polypeptides comprising at least one of the polypeptides as in (6);

(11) screening assays to detect whether compounds bind to the polynucleotides (I), or as in (1) or (2), or to polypeptides as in (6);

(12) a kit containing the polynucleotides (I) or as in (1) or (2); and

(13) a kit containing the **antibody** as in (7).

ACTIVITY - Anitbacterial.

MECHANISM OF ACTION - None given.

USE - The polypeptides as in (7) can be used in an immunogenic composition as a vaccine, the vaccine is especially against Chlamydia pneumonia (claimed). The vector as in

(3) can also be used as an immunogenic composition, especially where the vector directs the expression of a neutralizing epitope of Chlamydia pneumoniae (claimed). Chlamydia pneumoniae causes respiratory disease such as pneumonia and bronchitis and is thought to be a contributing factor in heart disease, sarcoidosis, sinusitis, purulent otitis media, erythema nodosum or pharyngitis

Dwg.0/3

L20 ANSWER 98 OF 126 CAPLUS COPYRIGHT 2003 ACS on STN
AN 1999:690977 CAPLUS
DN 131:321534
TI Chlamydia proteins and their uses
IN Rockey, Daniel D.; Bannantine, John P.
PA The State of Oregon, Acting by and Through the Oregon State Board of Higher, USA
SO PCT Int. Appl., 56 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9953948	A1	19991028	WO 1999-US8744	19990420
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2326002	AA	19991028	CA 1999-2326002	19990420
AU 9936590	A1	19991108	AU 1999-36590	19990420
AU 754122	B2	20021107		
EP 1073458	A1	20010207	EP 1999-918748	19990420
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				

PRAI US 1998-82438P P 19980420
US 1998-82588P P 19980421
US 1998-86450P P 19980522
WO 1999-US8744 W 19990420

AB Certain Chlamydia proteins have been found to be infection-specific and to be assocd. primarily with the vegetative Reticulate Body form of Chlamydia rather than with the refractile Elementary Body form of Chlamydia . The invention includes a **vaccine** directed against the Reticulate Body form of Chlamydia comprising one or more infection-specific proteins, or fraction thereof; a method of using such a **vaccine**; a method of prodn. of such a **vaccine**; a method for detection of infection-specific **antibodies** in a biol. specimen; a method for detection of infection-specific antigens in a biol. specimen and a method of using therapeutic agents specifically directed against infection-specific peptides, or the genes that code for such peptides, to treat chlamydial infection. The invention also includes the IncB, and IncC proteins of C. psittaci , and nucleotides encoding these proteins, and the TroA, TroB and p242 proteins of C. trachomatis , and the nucleotides that encode these polypeptides.

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 99 OF 126 CAPLUS COPYRIGHT 2003 ACS on STN
AN 1999:244557 CAPLUS
DN 130:277672
TI Chlamydia high-molecular-weight protein and its gene sequence and diagnostic and therapeutic uses
IN Jackson, James W.; Pace, John L.
PA Antex Biologics Inc., USA
SO PCT Int. Appl., 141 pp.
CODEN: PIXXD2
DT Patent
LA English

DT Article
LA English
ED Entered STN: 26 Oct 1999
Last Updated on STN: 26 Oct 1999
AB Background. Aboriginal children in central Australia have attack rates for acute lower respiratory tract infection (ALRI) that are similar to those in developing countries. Although mortality rates are much lower than in developing countries, morbidity is high and ALRI is still the leading cause of hospitalization. However, there are no data on the etiology of ALRI in this population. Methods. We prospectively studied 322 cases of ALRI in 280 Aboriginal children admitted to the hospital. Blood, urine and nasopharyngeal aspirate samples were examined for evidence of bacterial, viral and chlamydial infection. Results. The combination of blood culture, viral studies and chlamydial serology provided at least 1 etiologic agent in 170 of 322 (52.5%) cases. Assays for pneumolysin immune complex and pneumolysin **antibody** increased etiologic diagnosis to 219 (68.0%). Blood cultures were positive in 6% but pneumolysin immune complex and pneumolysin **antibody** studies were positive in one-third of cases. Evidence of viral infection was present in 155 (48%) of cases compared with 12% in controls (P < 001). There were only 7 possible cases and 2 definite cases of Chlamydia trachomatis and 3 cases of **Chlamydia pneumoniae**. Coinfection was common in these children. Conclusion. These findings have implications for both standard treatment protocols and **vaccine** strategies. The high rate of coinfection may make it difficult to develop simple clinical predictors of bacterial infection. In the setting of a developed country with efficient patient evacuation services, management algorithms that focus on disease severity and need for hospital referral will be most useful to health staff in remote communities. Pneumococcal conjugate **vaccines** will be required to reduce the high attack rate of pneumococcal disease.

L20 ANSWER 103 OF 126 MEDLINE on STN
AN 1999411011 MEDLINE
DN 99411011 PubMed ID: 10481397
TI Detection of anti-Chlamydia trachomatis **antibody** by means of enzyme immunoassay using synthetic peptide antigen.
AU Bannai H; Komoda T; Akita H; Iwata S; Sato Y; Sunakawa K
CS Dept. of Medical Technology, Kyorin University School of Health Sciences.
SO KANSENSHOGAKU ZASSHI. JOURNAL OF THE JAPANESE ASSOCIATION FOR INFECTIOUS DISEASES, (1999 Jul) 73 (7) 633-9.
Journal code: 0236671. ISSN: 0387-5911.
CY Japan
DT Journal; Article; (JOURNAL ARTICLE)
LA Japanese
FS Priority Journals
EM 199909
ED Entered STN: 19991012
Last Updated on STN: 19991012
Entered Medline: 19990928
AB Newly developed diagnostic kits for the detection of Anti-Chlamydia trachomatis, Peptide-Chlamvdia (LOY: Meiji Milk Products Co., Ltd., Tokyo; for IgG and IgA), were evaluated using the microimmunofluorescence assay (MIF) as the gold standard. These results were also compared to results of testing by Sero-IPALISA and immunoblot (I-B). Detection by LOY in based on enzyme immunoassay with synthetic peptides as the antigen. Thirty serum samples from pediatric patients and 130 serum samples from gynecology patients were used. All 26 pediatric samples that were positive for **Chlamydia pneumoniae** IgG **antibody** tested negative with LOY, indicating that the presence of the **antibody** against C. pneumoniae did not affect the assay by LOY. For 90 gynecological samples, the total, the positive and the negative agreement rates for IgG were quite high; i.e. 87.8%, 90.0% and 70.0% (LOY

vs MIF), 85.6%, 85.0% and 90.0% (Sero-IPALISA vs MIF), and 92.0%, 94.9% and 70.0% (I-B vs MIF), respectively. On the other hand, many cases of MIF (-) and LOY (+) discrepancy were seen in IgA detection. In order to better understand the basis for such disagreement. 34 serum samples were collected from patients whose cervical samples were negative for the Chlamydia group antigen based on the assay with IDEIA-Chlamydia. They were then assayed by MIF and LOY. The total, the positive and the negative agreement rates for IgG were 91.2%, 100% and 90.9%, while the total and the negative agreement rates for IgA were 88.2% and 88.2% (there were no IgA positive cases). Furthermore, 6 serum samples (1 case of MIF (+) LOY (+) and 5 cases of MIF (-) LOY (+)) were provided to determine whether LOY detects C. trachomatis specific IgA **antibody**. Increasing amounts of C. trachomatis serovar L2 were added to the serum samples resulting in a progressive decrease in their reactivity in the LOY assay. These results lead us to speculate that LOY can reveal even low levels of C. trachomatis specific IgA **antibody**. In conclusion, LOY can be used as an useful kit for detecting C. trachomatis **antibody**.

L20 ANSWER 104 OF 126 MEDLINE on STN
AN 1999409784 MEDLINE
DN 99409784 PubMed ID: 10482058
TI Bordetella pertussis, Bordetella parapertussis, Mycoplasma pneumoniae, **Chlamydia pneumoniae** and persistent cough in children.
AU Hallander H O; Gnarpe J; Gnarpe H; Olin P
CS Swedish Institute for Infectious Disease Control, Stockholm.
SO SCANDINAVIAN JOURNAL OF INFECTIOUS DISEASES, (1999) 31 (3) 281-6. Journal code: 0215333. ISSN: 0036-5548.
CY Sweden
DT (CLINICAL TRIAL)
(CONTROLLED CLINICAL TRIAL)
Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199910
ED Entered STN: 20000111
Last Updated on STN: 20000111
Entered Medline: 19991029
AB Material collected during a prospective pertussis **vaccine** trial in 1992-95 was examined for Bordetella pertussis (culture and serology), Bordetella parapertussis (culture), Mycoplasma pneumoniae and **Chlamydia pneumoniae** (PCR). From 64% (99/155) of episodes with cough for less than 100 d, 115 aetiological agents were identified in one southern and one northern subset of DT-recipients. The most common single agent was B. pertussis, representing 56%(64/115), with a median cough period of 51 d, followed by M. pneumoniae 26%(30/115), 23 d, C. pneumoniae 17% (19/115), 26 d, and B. parapertussis 2% (2/115). For co-infections, the median duration of cough was about 60 d. Spasmodic cough for 21 d or more (clinical WHO criteria for pertussis) was present in 82% (41/50) of infections with B. pertussis as single agent, 38% (17/45) with B. parapertussis, 38% (5/13) with C. pneumoniae, 26% (5/19) with M. pneumoniae and 30%(17/56) in cases where no aetiology was found. In children with cough for more than 100 d (n = 78) using all **vaccine** arms, B. pertussis was responsible in 83% (65/78), in 21%(16/78) together with other agents. Acellular **vaccines** were more efficient against serious disease than whole cell **vaccine**. Antibiotic treatment was more common at the southern (34%) study site than at the northern one (12%). The findings indicate that diagnosis should rely on laboratory confirmation, both for rational treatment of an individual case and for monitoring outbreaks.

L20 ANSWER 105 OF 126 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 54

JP 2002510970 W 20020409 (200227) 154p
AU 749382 B 20020627 (200254)
ADT WO 9858953 A2 WO 1998-DK266 19980619; AU 9880119 A AU 1998-80119 19980619; EP 1007685 A2 EP 1998-928179 19980619, WO 1998-DK266 19980619; BR 9810288 A BR 1998-10288 19980619, WO 1998-DK266 19980619; CN 1261403 A CN 1998-806428 19980619; JP 2002510970 W WO 1998-DK266 19980619, JP 1999-503613 19980619; AU 749382 B AU 1998-80119 19980619
FDT AU 9880119 A Based on WO 9858953; EP 1007685 A2 Based on WO 9858953; BR 9810288 A Based on WO 9858953; JP 2002510970 W Based on WO 9858953; AU 749382 B Previous Publ. AU 9880119, Based on WO 9858953
PRAI DK 1997-744 19970623
AB WO 9858953 A UPAB: 19990302
Species specific test for identifying mammals infected with **Chlamydia pneumoniae** is new. The test comprises detecting **antibodies** specific for 56.1 kDa or 89.6 - 100.3 kDa outer membrane proteins of C. pneumoniae, or detecting nucleic acid fragments encoding these proteins. Also claimed are: (A) nucleic acid fragments (N1) - (N12) (including fragments with 50 % homology to these sequences) derived from **Chlamydia pneumoniae**; (B) proteins (P1) - (P12) encoded by fragments (N1) - (N12), respectively or variants having at least 50% sequence similarity and similar biological function; and (C) polyclonal **antibodies** that specifically bind to proteins (P1) - (P12) or their variants.

USE - The proteins, **antibodies** and nucleic acid fragments form a diagnostic kit in the detection of mammalian infection by C. pneumoniae (claimed), which is a human respiratory pathogen. The protein is also used in the diagnosis of C. pneumoniae infection in mammals (claimed). Both the nucleic acid fragments and the proteins are used in the immunization (where the protein can be used by itself or as a composition) of mammals against C. pneumoniae (claimed). The nucleic acid fragments are particularly useful as DNA **vaccines** for effecting in vivo expression of antigens in immunization. The **vaccines** produced may also prevent atherosclerosis and bronchial asthma, which are possibly associated with C. pneumoniae.

ADVANTAGE - The species-specific nature of the test, using PCR, enables a sensitive and specific diagnosis of acute, and chronic respiratory tract infections caused by C. pneumoniae.

Dwg.0/21

L20 ANSWER 109 OF 126 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN DUPLICATE 57
AN 1999-080945 [07] WPIDS
DNC C1999-024315
TI New peptides derived from **Chlamydia pneumoniae** MOMP protein - useful to detect C. pneumoniae infection.
DC B04 D16
IN OHANA, B
PA (SAVY-N) SAVYON DIAGNOSTICS LTD
CYC 83
PI WO 9857981 A2 19981223 (199907)* EN 39p
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW
W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM GW HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZW
AU 9877862 A 19990104 (199921)
EP 1012182 A2 20000628 (200035) EN
R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE
IL 121114 A 20010319 (200129)
ADT WO 9857981 A2 WO 1998-IL277 19980615; AU 9877862 A AU 1998-77862 19980615; EP 1012182 A2 EP 1998-925909 19980615, WO 1998-IL277 19980615; IL 121114 A IL 1997-121114 19970619

FDT AU 9877862 A Based on WO 9857981; EP 1012182 A2 Based on WO 9857981
PRAI IL 1997-121114 19970619
AB WO 9857981 A UPAB: 19990217
A new peptide (P1), for use in the diagnosis of C. pneumoniae, is; (i) derived from the variable domain of C. pneumoniae major outer membrane protein (MOMP); (ii) between 9-40 amino acids; (iii) able to react with **antibodies** formed during C. pneumoniae; and (iv) characterised by having essentially very low cross-reactivity towards **antibodies** against other Chlamydia species.

Also claimed are: (1) a method for detecting C. pneumoniae infection in an individual, comprising (a) obtaining a body fluid sample, from the individual; (b) contacting the sample with a mixture of P1 peptides; and (c) determining the extent of reaction between the sample and the peptide mixture, preferably using the ELISA kit detailed below; and (2) an ELISA, RIA, EIA, Immuno competition assay, lateral chromatography assay, or'' SeroRapid'' (R) assay kit, containing P1 peptides, for the diagnosis of C. pneumoniae infection.

USE - A mixture of P1 peptides is used to detect C, pneumoniae infection, and in the preparation of **vaccines** (claimed).

ADVANTAGE - The detection method is more specific, efficient, and reproducible than prior art methods which do not reliably distinguish serologically between Chlamydia species.

Dwg.0/10

L20 ANSWER 110 OF 126 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN DUPLICATE 58
AN 1998-159277 [14] WPIDS
DNC C1998-051363
TI Preventing or delaying atherosclerosis or restenosis - by combating infection by cytomegalovirus and/or **Chlamydia pneumoniae**, by administration of protein or DNA **vaccine** or antimicrobial agent.
DC B04 D16
IN BERENCSI, K; GONCZOL, E
PA (WIST-N) WISTAR INST ANATOMY & BIOLOGY; (BERE-I) BERENCSI K; (GONC-I) GONCZOL E
CYC 23
PI WO 9806408 A1 19980219 (199814)* EN 53p
RW: AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE
W: AU CA HU JP
AU 9739843 A 19980306 (199830)
EP 964686 A1 19991222 (200004) EN
R: AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE
HU 9903964 A2 20000328 (200025)
JP 2000516617 W 20001212 (200101) 46p
AU 728285 B 20010104 (200107)
AU 2001023031 A 20010524 (200139)#
US 6291437 B1 20010918 (200157)
US 2001029251 A1 20011011 (200162)
ADT WO 9806408 A1 WO 1997-US14443 19970814; AU 9739843 A AU 1997-39843 19970814; EP 964686 A1 EP 1997-937292 19970814, WO 1997-US14443 19970814; HU 9903964 A2 WO 1997-US14443 19970814, HU 1999-3964 19970814; JP 2000516617 W WO 1997-US14443 19970814, JP 1998-510083 19970814; AU 728285 B AU 1997-39843 19970814; AU 2001023031 A Div ex AU 1997-39843 19970814, AU 2001-23031 20010216; US 6291437 B1 Provisional US 1996-23404P 19960814, US 1997-911299 19970814; US 2001029251 A1 Provisional US 1996-23404P 19960814, Cont of US 1997-911299 19970814, US 2001-859242 20010517
FDT AU 9739843 A Based on WO 9806408; EP 964686 A1 Based on WO 9806408; HU 9903964 A2 Based on WO 9806408; JP 2000516617 W Based on WO 9806408; AU 728285 B Previous Publ. AU 9739843, Based on WO 9806408; AU 2001023031 A Div ex AU 728285
PRAI US 1996-23404P 19960814; AU 2001-23031 20010216; US 1997-911299 19970814; US 2001-859242 20010517

AB WO 9806408 A UPAB: 19980406
Use of HCMV (human cytomegalovirus) protein (I) to prevent or retard development of atherosclerotic lesions or restenosis in a mammal is new.

(I) is administered to induce cell-mediated and/or **antibody** response to HCMV.

Also claimed are:

(1) a similar use of nucleic acid (II) encoding (I);

(2) A similar use of immunogenic **Chlamydia pneumoniae** protein (III), or its fragments, or nucleic acid (IV) encoding (III), and

(3) composition containing antimicrobial (V) effective against C. pneumoniae or antiviral against HCMV for the same purpose.

USE - The method is particularly used to **vaccinate** children or immuno-compromised subjects (e.g. patients receiving transplants, blood transfusions or immunosuppressive treatment) and to prevent restenosis after atherectomy or balloon angioplasty; to avoid transmission of CMV to a foetus, or generally to treat any existing or anticipated injury to an artery.

The methods are based on the idea that infection with HCMV and/or C. pneumoniae is involved in development of atherosclerosis by damaging intimal cells.

Dwg.0/4

L20 ANSWER 111 OF 126 BIOTECHDS COPYRIGHT 2003 THOMSON DERWENT/ISI on STN
AN 1998-04462 BIOTECHDS
TI Immunogen for protection against Chlamydia contains non-replicative vector;
nucleic acid **vaccine**
AU Brunham R C
PA Univ.Manitoba
LO Winnipeg, Manitoba, Canada.
PI WO 9802546 22 Jan 1998
AI WO 1997-CA500 11 Jul 1997
PRAI US 1996-21607 12 Jul 1996
DT Patent
LA English
OS WPI: 1998-110593 [10]
AB An immunogenic composition for generating a protective response to a major outer membrane protein (MOMP) of Chlamydia sp. involves, an adjuvant, a non-replicating vector (A) containing (i) a sequence (I) encoding MOMP or its immunogenic fragment and (ii) a coupled promoter. The compositions are used as nucleic acid **vaccines** for protecting humans against Chlamydia, strains that cause lung diseases, specifically Chlamydia trichomatis, but also **Chlamydia pneumoniae**. The compositions induce a cellular immune response and a recall response following exposure to wild-type Chlamydia spp. They are also used to raise **antibodies** against MOMP. Immunization with (I) gives significant protection against lung challenge, better than that achieved with recombinant MOMP or synthetic peptides. The response may be amplified by co-administration of DNA encoding immunostimulatory cytokines and use of several genes for Chlamydia spp. antigens or MOMP genes from several different strains may increase the level of protection. The promoter is cytomegalo virus and the vector is plasmic pcDNA3. (A) may be administered by lipofection. (41pp)

L20 ANSWER 112 OF 126 CAPLUS COPYRIGHT 2003 ACS on STN
AN 1998:711563 CAPLUS
DN 130:76800
TI High-level expression of Chlamydia psittaci major outer membrane protein in COS cells and in skeletal muscles of turkeys
AU Vanrompay, D.; Cox, E.; Mast, J.; Goddeeris, B.; Volckaert, G.
CS Laboratory of Gene Technology, University of Leuven, Louvain, 3001, Belg.

SO Infection and Immunity (1998), 66(11), 5494-5500
CODEN: INFIBR; ISSN: 0019-9567
PB American Society for Microbiology
DT Journal
LA English
AB The omp1 genes encoding the major outer membrane proteins (MOMPs) of avian Chlamydia psittaci serovar A and D strains were cloned and sequenced. The nucleotide sequences of the avian C. psittaci serovar A and D MOMP genes were found to be 98.9 and 87.8% identical, resp., to that of the avian C. psittaci serovar A strain 6BC, 84.6 and 99.8% identical to that of the avian C. psittaci serovar D strain NJ1, 79.1 and 81.1% identical to that of the C. psittaci guinea pig inclusion conjunctivitis strain, 60.9 and 62.5% identical to that of the Chlamydia trachomatis L2 strain, and 57.5 and 60.4% identical to that of the **Chlamydia pneumoniae** IOL-207 strain. The serovar A or D MOMPs were cloned in the mammalian expression plasmid pcDNA1. When pcDNA1/MOMP A or pcDNA1/MOMP D was introduced into COS7 cells, a 40-kDa protein that was identical in size, antigenicity, and electrophoretic mobility to native MOMP was produced. Recombinant MOMP (rMOMP) was located in the cytoplasm of transfected COS7 cells as well as in the plasma membrane and was immunoaccessible. I.m. administration of pcDNA1/MOMP in specific-pathogen-free turkeys resulted in local expression of rMOMP in its native conformation, after which anti-MOMP **antibodies** appeared in the serum.
RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 113 OF 126 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 59
AN 1998:393511 BIOSIS
DN PREV199800393511
TI Characterization of a neutralizing monoclonal **antibody** directed at the lipopolysaccharide of **Chlamydia pneumoniae**.
AU Peterson, Ellena M. [Reprint author]; De La Maza, Luis M.; Brade, Lore; Brade, Helmut
CS Dep. Pathol., Med. Sci. Build., Room D440, Univ. Calif., Irvine, CA 92697-4800, USA
SO Infection and Immunity, (Aug., 1998) Vol. 66, No. 8, pp. 3848-3855. print.
CODEN: INFIBR. ISSN: 0019-9567.
DT Article
LA English
ED Entered STN: 10 Sep 1998
Last Updated on STN: 10 Sep 1998
AB Identification of protective epitopes is one of the first steps in the development of a subunit **vaccine**. One approach to accomplishing this is to identify structures or epitopes by using monoclonal **antibodies** (MAb) that can attenuate infectivity in vitro and in vivo. To date attempts to use this approach with **Chlamydia pneumoniae** have failed. This report is the first description of a MAb directed to the lipopolysaccharide (LPS) of Chlamydia that neutralizes both in vitro and in vivo the infectivity of C. pneumoniae. MAb CP-33, an immunoglobulin G2b (IgG2b), was identified from a fusion using splenocytes from mice immunized with C. pneumoniae TW-183. By Western blot analysis, MAb CP-33 exhibited genus-specific reactivity in that it recognized the LPSs of C. pneumoniae, Chlamydia trachomatis, and Chlamydia psittaci. MAb CP-33 did not react with 15 genera of gram-negative and gram-positive bacteria and Candida albicans. By using isolated LPS of Re mutants of Escherichia coli, Salmonella enterica serovar Minnesota, and recombinants expressing the 3-deoxy-D-manno-oct-2-ulosonic acid (Kdo) transferase gene kdtA of C. trachomatis, MAb CP-33 was shown to require for binding the presence of the genus-specific trisaccharide epitope alphaKdo(2fwdarw8)alphaKdo(2fwdarw4)alphaKdo. By employing synthetic oligosaccharides and neoglycoconjugates in an enzyme immunoassay (EIA) and EIA inhibition, it was further shown that MAb CP-33 differed from the

extensively investigated prototype chlamydial LPS MAb S25-23. Most likely, MAb CP-33 recognizes a conformational epitope in which the alphaKdo(2fwdarw8)alphaKdo(2fwdarw4)alphaKdo trisaccharide is an essential structural component. When tested in an in vitro neutralization assay, MAb CP-33 gave a 50% neutralization titer of 8 ng/ml against C. pneumoniae TW-183. However, this MAb did not neutralize other C. pneumoniae strains, C. trachomatis, or C. psittaci. C. pneumoniae TW-183 was treated with either MAb CP-33 or a control IgG and then used to inoculate mice by the respiratory route. Five days after inoculation, there was a difference between the mice inoculated with the control IgG-treated inoculum and those inoculated with the MAb CP-33-treated organisms as to the number of mice infected as well as the number of inclusion-forming units recovered from lung cultures ($P < 0.05$). In summary, a Chlamydia-specific LPS MAb was able to neutralize in vitro the infectivity of C. pneumoniae TW-183.

L20 ANSWER 114 OF 126 CAPLUS COPYRIGHT 2003 ACS on STN
AN 1999:429580 CAPLUS
DN 131:227398
TI Preparation and immunological characterization of species-specific monoclonal **antibodies** against **chlamydia pneumoniae**
AU Zhu, Jin; Yu, Shurong; Zhang, Xue; Rao, Xiancai
CS Southwest Hospital, Third Military Medical University, Chungking, 400038, Peop. Rep. China
SO Di-San Junyi Daxue Xuebao (1997), 19(5), 398-400
CODEN: DYXUE8; ISSN: 1000-5404
PB Di-San Junyi Daxue
DT Journal
LA Chinese
AB To study the protective antigens of **chlamydia pneumoniae** (Cpn). After two strains of hybridoma secreting the monoclonal **antibodies** (McAbs) specific to Cpn were produced, the titer and specificity of McAbs were detd. with IFA and immunoblotting. Meanwhile, McAb2G5 was used in the in vitro neutralization test of the cell culture. The titer of McAb2G5 was 1:102400 and that of McAb4F71:51200. Both of them were the species-specific **antibodies** which could recognize the Mr 98.times.103 protein of Cpn. In vitro neutralization test showed that McAb2G5 exerted remarkable complement-dependent neutralization effects and its neutralization titer was 1:130 (0.04 mg/mL). The species-specific McAb2G5 can exert neutralization effects on the Mr 98.times.103 protein of Cpn. This is important for the study of antigens and the prodn. of effective **vaccines** of Cpn.

L20 ANSWER 115 OF 126 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 60
AN 1997:274540 BIOSIS
DN PREV199799566258
TI Manipulation of immune responses via particle-mediated polynucleotide **vaccines**.
AU Swain, W. F. [Reprint author]; Macklin, M. D. [Reprint author]; Neumann, V. [Reprint author]; McCabe, D. E. [Reprint author]; Drape, R. [Reprint author]; Fuller, J. T. [Reprint author]; Widera, G. [Reprint author]; McGregor, M.; Callan, R. J.; Hinshaw, V.
CS Auragen Inc., 8520 University Green, Middleton, WI 53562, USA
SO Behring Institute Mitteilungen, (1997) Vol. 0, No. 98, pp. 73-78.
CODEN: BHIMA2. ISSN: 0301-0457.
DT Article
LA English
ED Entered STN: 24 Jun 1997
Last Updated on STN: 24 Jun 1997
AB Polynucleotide **vaccines** are a new approach to immunization that promises qualitative advances in **vaccine** technology. These **vaccines** mimic infection in that they result in expression of

pathogen gene products in situ, which can elicit both cell-mediated immune responses and humoral responses. This approach has been applied primarily to **vaccines** against viral diseases, but may be significant for **vaccines** directed toward bacterial pathogens. Auragen has developed a generally applicable gene transfer technology and, for **vaccine** applications, has focused on particlemediated gene transfer to epidermis. Results demonstrate that Accell polynucleotide **vaccines** induce immune responses toward human immunodeficiency virus (HIV) antigens, influenza A virus antigens, and hepatitis B virus (HBV) antigens in rodents, swine and primates. Cellular immune responses toward these antigens have been demonstrated in rodents. In a swine influenza challenge model Accell **vaccination** provides protection equivalent to that of a commercial killed-whole-virus **vaccine**. **Vaccination** of mice by this method toward a **Chlamydia pneumoniae** major outer-membrane protein elicits a species-specific **antibody** response.

L20 ANSWER 116 OF 126 MEDLINE on STN
AN 96333381 MEDLINE
DN 96333381 PubMed ID: 8757875
TI Characterization of the murine **antibody** response to peptides representing the variable domains of the major outer membrane protein of **Chlamydia pneumoniae**.
AU Peterson E M; Cheng X; Qu Z; de La Maza L M
CS University of California, Irvine 92717-4800, USA.
SO INFECTION AND IMMUNITY, (1996 Aug) 64 (8) 3354-9.
Journal code: 0246127. ISSN: 0019-9567.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199609
ED Entered STN: 19961008
Last Updated on STN: 19970203
Entered Medline: 19960926
AB In an attempt to gain more knowledge about the immunogenicity of the variable domains (VDs) of the major outer membrane protein (MOMP) of **Chlamydia pneumoniae**, peptides representing these areas were used to immunize BALB/c and C57BL/6 mice. Antisera to the peptides and to peptides conjugated to keyhole limpet hemocyanin (KLH) were characterized by their ability to recognize the immunizing peptide and elementary bodies (EBs) of C. pneumoniae by enzyme-linked immunosorbent assay (ELISA) and Western blot (immunoblot). In addition, antiserum was analyzed for its molecular specificity by a pepscan as well as its in vitro neutralizing ability. In general, results obtained with antisera to the peptides paralleled the results obtained with the antisera to the KLH-conjugated peptides except that the titers or strength of reaction in the assays was less. Antisera to the VDs in both strains of mice gave ELISA titers to the homologous VD peptide ranging from 1,000 to >64,000. The strength of reactivity with the reduced MOMP as judged by Western blot, in most cases, paralleled the ELISA titer to the peptide. However, only antisera raised in both strains of mice to the VD1 and VD4 peptides reacted strongly with the EBs, suggesting surface exposure of these VDs. In addition, antisera to VD3 from C57BL/6 mice gave strong reactivity to EBs. By pepscan analysis antisera from both strains of mice reacted with several VD1 and VD3 octameric peptides, with weaker reactivity being seen with the octameric peptides in the other two VDs. This was in contrast to antisera raised to EBs of C. pneumoniae TW-183, which identified two immunogenic regions, one in VD1 and the other mapped to VD4. While antisera raised to EBs strongly neutralized the infectivity of C. pneumoniae, none of the peptide antisera was able to neutralize. In addition, peptides to the VDs were not able to block the neutralizing ability of the antisera to EBs of C. pneumoniae. Therefore, these results

psittaci, and **Chlamydia pneumoniae**, which were used as nontreated and heat-treated (56 degree C, 30 min) antigens in a dot blot assay, only serovars C. I. J, and L3 were recognized with both the native and treated antigens. Western blot (immunoblot) results showed that MAb C10 recognized the major outer membrane protein of these four serovars. Overlapping hexameric peptides corresponding to variable domains (VDs) I, II, III, and IV of the major outer membrane protein of C. trachomatis serovar C were synthesized, and peptide screening showed that MAb C10 mapped to the VD I amino acid sequence VAGLQNDPT. Results of an in vitro neutralization assay correlated with those of the indirect immunofluorescence assay, Western blod, and dot blot assay in that only serovars C, I, J, and L3 were neutralized by MAb C10. In vitro competitive neutralization experiments, using a peptide representing VD I of serovar C to compete with C. trachomatis serovar C for MAb C10 binding, revealed that both serological and neutralizing activities of MAb C10 were inhibited by the VD I peptide. In an in vivo toxicity/infectivity assay using serovar L3 pretreated with MAb C10, there was 100% survival of mice infected with a lethal dose at 48 h. In contrast, the control group, consisting of mice injected with the same dose of L3 pretreated with a MAb that does not recognize L3, had no survivors during a 48-h observation period. In summary, since the surface-exposed contiguous epitope recognized by MAb C10 binds neutralizing **antibodies** that are subspecies specific for the C and C-related complexes, it should be considered for inclusion in the development of a chlamydial **vaccine**.

L20 ANSWER 123 OF 126 EMBASE COPYRIGHT 2003 ELSEVIER INC. ALL RIGHTS RESERVED. on STN
AN 93157866 EMBASE
DN 1993157866
TI Lung infections in children.
AU Stark J.M.
CS Division of Pulmonary Medicine, Children's Hospital Medical Center, Elland and Bethesda Avenues,Cincinnati, OH 45229-2899, United States
SO Current Opinion in Pediatrics, (1993) 5/3 (273-280).
ISSN: 1040-8703 CODEN: COPEE
CY United States
DT Journal; General Review
FS 004 Microbiology
007 Pediatrics and Pediatric Surgery
015 Chest Diseases, Thoracic Surgery and Tuberculosis
037 Drug Literature Index
038 Adverse Reactions Titles
LA English
SL English
AB Airway infections in children is a considerably broad topic. This discussion focuses on several common nonbacterial causes of lower respiratory tract infection in children, including respiratory syncytial virus, Mycoplasma pneumoniae, and **Chlamydia pneumoniae**. In addition, the occurrence of two important bacterial causes of lower respiratory illness (Bordetella pertussis and Mycobacterium tuberculosis) is increasing. This review focuses on current information on the prophylaxis, treatment, and diagnosis of these agents. Finally, consideration is given to infections in immunocompromised children: the effects of respiratory syncytial virus infections in immunosuppressed transplant patients, and prevention and diagnosis of opportunistic infections (including Pneumocystis carinii) in children with human immunodeficiency virus.

L20 ANSWER 124 OF 126 EMBASE COPYRIGHT 2003 ELSEVIER INC. ALL RIGHTS RESERVED. on STN
AN 93055597 EMBASE
DN 1993055597

TI [Seasonal epidemiology: Winter 1993. Prevention of colds and influenza]. SAISONALE EPIDEMILOGIE: WINTER 1993. GEGEN 'ERKALTUNG' UND 'GRIPPPE' WAPPNEN.
AU Brede H.D.
CS Chemotherapeutisches Forschungsinst., Paul-Ehrlich-Strasse 42-44,6000 Frankfurt 70, Germany
SO Münchener Medizinische Wochenschrift, (1993) 135/6 (10+12). ISSN: 0341-3098 CODEN: MMWOAU
CY Germany
DT Journal; (Short Survey)
FS 004 Microbiology
017 Public Health, Social Medicine and Epidemiology
037 Drug Literature Index
LA German
SL German

L20 ANSWER 125 OF 126 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
AN 1992:518246 BIOSIS
DN PREV199243115696; BR43:115696
TI CHARACTERIZATION OF A C AND C-RELATED COMPLEX NEUTRALIZING MONOCLONAL **ANTIBODY** DIRECTED AT THE VD I REGION OF THE MAJOR OUTER MEMBRANE PROTEIN MOMP OF CHLAMYDIA-TRACHOMATIS.
AU QU Z [Reprint author]; CHENG X; DE LA MAZA L M; PETERSON E M
CS UNIV CALIF, IRVINE, CALIF, USA
SO Program and Abstracts of the Interscience Conference on Antimicrobial Agents and Chemotherapy, (1992) Vol. 32, pp. 251.
Meeting Info.: 32ND INTERSCIENCE CONFERENCE ON ANTIMICROBIAL AGENTS AND CHEMOTHERAPY, ANAHEIM, CALIFORNIA, USA, OCTOBER 11-14, 1992. PROGRAM ABSTR INTERSCI CONF ANTIMICROB AGENTS CHEMOTHERAPY.
ISSN: 0733-6373.
DT Conference; (Meeting)
FS BR
LA ENGLISH
ED Entered STN: 11 Nov 1992
Last Updated on STN: 11 Nov 1992

L20 ANSWER 126 OF 126 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
AN 1992:28968 BIOSIS
DN PREV199293018243; BA93:18243
TI FUNCTIONAL AND STRUCTURAL MAPPING OF CHLAMYDIA-TRACHOMATIS SPECIES-SPECIFIC MAJOR OUTER MEMBRANE PROTEIN EPITOPES BY USE OF NEUTRALIZING MONOCLONAL **ANTIBODIES**.
AU PETERSON E M [Reprint author]; CHENG X; MARKOFF B A; FIELDER T J; DE LA MAZA L M
CS DEP PATHOLOGY, MEDICAL SCIENCE BUILDING, ROOM D440, UNIVERSITY CALIFORNIA, IRVINE, IRVINE, CALIF 92717, USA
SO Infection and Immunity, (1991) Vol. 59, No. 11, pp. 4147-4153. CODEN: INFIBR. ISSN: 0019-9567.
DT Article
FS BA
LA ENGLISH
ED Entered STN: 6 Jan 1992
Last Updated on STN: 6 Jan 1992
AB Three monoclonal **antibodies** (MAbs), E4, L1-4, and L1-24, to the major outer membrane protein (MOMP) of Chlamydia trachomatis were identified that neutralized in vitro the infectivity of members of the B- and C-related complex as well as the mouse pneumonitis strain. MAbs L1-4, L1-24, and E4 gave a strong signal in an indirect immunofluorescence assay and/or Western immunoblot with all serovars of the lymphogranuloma venereum and trachoma biovars and a weak signal with the mouse biovar. In addition, C. psittaci and C. pneumoniae were also weakly recognized by MAbs L1-4 and L1-24. As determined by the technique of overlapping peptides, all three MAbs showed reactivity to variable domain (VD) IV of

MOMP. While all three MAbs had different recognition patterns, all strongly bound to the peptides TLNPTI and LNPTIA within the species-conserved region of VD IV. MAb E4 also recognized the peptide SATAIF in the subspecies region of VD IV. Peptides corresponding to VD IV of MOMP were synthesized and used in competitive inhibition experiments to determine the functional location of the epitope recognized by these three MAbs. Both the serological and neutralizing activities of MAb E4 were inhibited by the peptides ATAIFDTTTLNPTIAG and FDTTTLNPTIAG; however, none of the peptides made to the VD IV region blocked the neutralizing activity of MAbs L1-4 and L1-24. Therefore, the neutralizable domain of the epitope recognized by MAb E4 is contiguous and may be an important candidate for inclusion in a subunit **vaccine**.

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=> d his

     (FILE 'HOME' ENTERED AT 16:36:59 ON 28 OCT 2003)

     FILE 'BIOSIS, MEDLINE, AGRICOLA, EMBASE, CABA, WPIDS, JAPIO, BIOTECHDS,
     LIFESCI, CAPLUS' ENTERED AT 16:37:16 ON 28 OCT 2003
                 E MURDIN ANDREW D/AU
L1           100 S E1-E4
                 E OOMEN RAYMOND P/AU
L2            88 S E1-E4
                 E WANG JOE/AU
L3            37 S E3-E5
L4           149 S L1-L3
L5            70 S L4 AND CHLAMYDIA?
L6            59 S L5 AND VACCIN?
L7            54 DUP REM L6 (5 DUPLICATES REMOVED)
L8             3 S L7 AND (DNA VACCIN? OR NUCLEIC ACID VACCIN?)
L9          9649 S CHLAMYDIA PNEUMONIAE
L10          481 S L9 AND VACCIN?
L11           65 S L10 AND (DNA VACCIN? OR NUCLEIC ACID VACCIN?)
L12           55 DUP REM L11 (10 DUPLICATES REMOVED)
L13          334 S L10 AND (ANTIGEN OR PROTEIN OR PEPTIDE)
L14           38 S L13 AND IMMUNOGENIC FRAGMENT
L15           26 DUP REM L14 (12 DUPLICATES REMOVED)
L16          275 S L10 AND (DIAGNOSIS OR DETECT? OR ASSAY)
L17           72 S L16 AND (FUSION PROTEIN OR HETEROLOGOUS POLYPEPTIDE)
L18           40 DUP REM L17 (32 DUPLICATES REMOVED)
L19          250 S L10 AND ANTIBOD?
L20          126 DUP REM L19 (124 DUPLICATES REMOVED)

=> s l20 and (primer or primers or probe or probes)
L21           51 L20 AND (PRIMER OR PRIMERS OR PROBE OR PROBES)

=> s l21 and (diagnosis or detect? or assay)
   8 FILES SEARCHED...
L22           50 L21 AND (DIAGNOSIS OR DETECT? OR ASSAY)

=> d bib ab 1-50

L22  ANSWER 1 OF 50  WPIDS  COPYRIGHT 2003 THOMSON DERWENT on STN
AN   2003-120786 [11]   WPIDS
DNC  C2003-031351
TI   New Staphylococcus aureus protein, useful as a vaccine for
     treating or preventing Staphylococcal infection, specifically an infection
     caused by S. aureus, e.g. sepsis.
DC   B04 D16
IN   MASIGNANI, V; MORA, M; SCARSELLI, M
PA   (CHIR-N) CHIRON SPA
CYC  100
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=> e wang joe/au
E1            3     WANG JOANNE/AU
E2            1     WANG JOCELE P/AU
E3           35 --> WANG JOE/AU
E4            1     WANG JOE C W/AU
E5            1     WANG JOE J/AU
E6            1     WANG JOEL J/AU
E7            1     WANG JOESPH/AU
E8            2     WANG JOH MING/AU
E9           42     WANG JOHANNES/AU
E10          17     WANG JOHANNING F/AU
E11           1     WANG JOHANNING F W/AU
E12          20     WANG JOHANNING FENG/AU

=> s e3-e5
L3           37 ("WANG JOE"/AU OR "WANG JOE C W"/AU OR "WANG JOE J"/AU)

=> s l1-l3
L4          149 (L1 OR L2 OR L3)

=> s l4 and chlamydia?
L5           70 L4 AND CHLAMYDIA?

=> s l5 and vaccin?
L6           59 L5 AND VACCIN?

=> dup rem l6
PROCESSING COMPLETED FOR L6
L7           54 DUP REM L6 (5 DUPLICATES REMOVED)

=> s l7 and (dna vaccin? or nucleic acid vaccin?)
   8 FILES SEARCHED...
L8            3 L7 AND (DNA VACCIN? OR NUCLEIC ACID VACCIN?)

=> d bib ab 1-3

L8   ANSWER 1 OF 3  BIOSIS  COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
AN   2000:291351  BIOSIS
DN   PREV200000291351
TI   Priming with Chlamydia trachomatis major outer membrane protein
     (MOMP) DNA followed by MOMP ISCOM boosting enhances protection and is
     associated with increased immunoglobulin A and Th1 cellular immune
     responses.
AU   Dong-Ji, Zhang; Yang, Xi; Shen, Caixia; Lu, Hong; Murdin, Andrew
     ; Brunham, Robert C. [Reprint author]
CS   University of British Columbia Centre of Disease Control, 2077-655 West
     12th, Vancouver, V5Z 4R4, Canada
SO   Infection and Immunity, (June, 2000) Vol. 68, No. 6, pp. 3074-3078. print.
     CODEN: INFIBR. ISSN: 0019-9567.
DT   Article
LA   English
ED   Entered STN: 6 Jul 2000
     Last Updated on STN: 7 Jan 2002
AB   We previously reported that DNA vaccination was able
     to elicit cellular immune responses and partial protection against
     Chlamydia trachomatis infection.  However, DNA immunization alone
     did not generate immune responses or protection as great as that induced
     by using live organisms.  In this study, we evaluated the immunologic
     effects of a combinational vaccination approach using C.
     trachomatis mouse pneumonitis (MoPn) major outer membrane protein (MOMP)
     DNA priming followed by boosting with immune-stimulating complexes (ISCOM)
     of MOMP protein (MOMP ISCOM) for protection of BALB/c mice against MoPn
     lung infection.  Substantially better protection to challenge infection
```

MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

CA 2337092	AA	20000210	CA 1999-2337092	19990727	
AU 9947929	A1	20000221	AU 1999-47929	19990727	
EP 1144638	A2	20011017	EP 1999-931394	19990727	
EP 1144638	A3	20011128			

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

PRAI US 1998-94198P	P	19980727	
US 1999-360707	A2	19990726	
WO 1999-IB1328	W	19990727	

AB This invention provides protein and DNA sequences encoding a **Chlamydia** pneumoniae protein, designated CPN100202. The invention also provides for the use of the disclosed protein/gene in **vaccines** against **Chlamydia**. Thus, the invention discloses a vector contg. a nucleotide sequence encoding CPN100202 operably linked to a promoter to effect expression of CPN100202 in the host. The invention also provides for the use of the CPN100202 protein/gene in diagnostic assays for **Chlamydia** infection. Sequence no. 4 claimed but not present.

L7 ANSWER 47 OF 54 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 1
AN 2002:440034 BIOSIS
DN PREV200200440034
TI Induction of protective immunity against **Chlamydia** trachomatis genital infection by a **vaccine** based on major outer membrane protein-lipophilic immune response-stimulating complexes.
AU Igietseme, Joseph U. [Reprint author]; **Murdin, Andrew**
CS Department of Microbiology and Immunology, Morehouse School of Medicine, 720 Westview Dr. S.W., Atlanta, GA, 30310, USA
igietsj@msm.edu
SO Infection and Immunity, (December, 2000) Vol. 68, No. 12, pp. 6798-6806. print.
CODEN: INFIBR. ISSN: 0019-9567.
DT Article
LA English
ED Entered STN: 14 Aug 2002
Last Updated on STN: 14 Aug 2002
AB The significance of delivery systems in modern **vaccine** design strategies is underscored by the fact that a promising **vaccine** formulation may fail in vivo due to an inappropriate delivery method. We evaluated the immunogenicity and efficacy of a candidate **vaccine** comprising the major outer membrane protein (MOMP) of **Chlamydia** trachomatis delivered with the lipophilic immune response-stimulating complexes (ISCOMs) as a vehicle with adjuvant properties, in a murine model of **chlamydial** genital infection. Immunocompetent BALB/c mice were immunized intranasally (IN) or intramuscularly (IM) with MOMP, MOMP-ISCOMs, and live or heat-inactivated C. trachomatis serovar D. The level of local genital mucosal Th1 response was measured by assaying for antigen-specific Th1 cell induction and recruitment into the genital mucosa at different times after immunization. Immunization with MOMP-ISCOMs by the IM route induced the greatest and fastest local genital mucosal Th1 response, first detectable 2 weeks after exposure. Among the other routes and regimens tested, only IN immunization with MOMP-ISCOMs induced detectable and statistically significant levels of local genital mucosal Th1 response during the 8-week test period ($P < 0.001$). In addition, when T cells from immunized mice were adoptively transferred into syngeneic naive animals and challenged intravaginally with

Chlamydia, recipients of IM immunization of MOMP-ISCOMs cleared their infection within 1 week and were resistant to reinfection. Animals that received IN immunization of MOMP-ISCOMs were partially protected, shedding fewer **chlamydiae** than did control mice. Altogether, the results suggested that IM delivery of MOMP-ISCOMs may be a suitable **vaccine** regimen potentially capable of inducing protective mucosal immunity against C. trachomatis infection.

L7 ANSWER 48 OF 54 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 2
AN 2000:291351 BIOSIS
DN PREV200000291351
TI Priming with **Chlamydia** trachomatis major outer membrane protein (MOMP) DNA followed by MOMP ISCOM boosting enhances protection and is associated with increased immunoglobulin A and Th1 cellular immune responses.
AU Dong-Ji, Zhang; Yang, Xi; Shen, Caixia; Lu, Hong; **Murdin, Andrew** ; Brunham, Robert C. [Reprint author]
CS University of British Columbia Centre of Disease Control, 2077-655 West 12th, Vancouver, V5Z 4R4, Canada
SO Infection and Immunity, (June, 2000) Vol. 68, No. 6, pp. 3074-3078. print.
CODEN: INFIBR. ISSN: 0019-9567.
DT Article
LA English
ED Entered STN: 6 Jul 2000
Last Updated on STN: 7 Jan 2002
AB We previously reported that DNA **vaccination** was able to elicit cellular immune responses and partial protection against **Chlamydia** trachomatis infection. However, DNA immunization alone did not generate immune responses or protection as great as that induced by using live organisms. In this study, we evaluated the immunologic effects of a combinational **vaccination** approach using C. trachomatis mouse pneumonitis (MoPn) major outer membrane protein (MOMP) DNA priming followed by boosting with immune-stimulating complexes (ISCOM) of MOMP protein (MOMP ISCOM) for protection of BALB/c mice against MoPn lung infection. Substantially better protection to challenge infection was observed in mice given combinational **vaccination** compared with mice given MOMP ISCOM immunization alone, and the protection approximated that induced by live organisms. Enhanced protection was correlated with stronger delayed-type hypersensitivity, higher levels of gamma interferon production, and increased immunoglobulin A antibody responses in lung homogenates. The results indicate that DNA priming followed by ISCOM protein boosting may be useful in designing a fully protective **chlamydial vaccine**.

L7 ANSWER 49 OF 54 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
AN 2000:347998 BIOSIS
DN PREV200000347998
TI Collaborative multidisciplinary workshop report: Progress toward a **Chlamydia** pneumoniae **vaccine**.
AU **Murdin, Andrew D.** [Reprint author]; Gellin, Bruce; Brunham, Robert C.; Campbell, Lee Ann; Christiansen, Gunna; Deal, Carolyn D.; Jenson, Hal B.; Metcalf, Benjamin; Sankaran, Banu; Stephens, Richard S.; Wilfert, Cathy
CS Aventis Pasteur, 1755 Steeles Ave. W., Toronto, ON, M2R 3T4, Canada
SO Journal of Infectious Diseases, (June, 2000) Vol. 181, No. Supplement 3, pp. S552-S557. print.
CODEN: JIDIAQ. ISSN: 0022-1899.
DT Article
LA English
ED Entered STN: 16 Aug 2000
Last Updated on STN: 7 Jan 2002

WO 2000034483 A3 20011101
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
EP 1144642 A2 20011017 EP 1999-963037 19991208
EP 1144642 A3 20020605
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO
BR 9916020 A 20020122 BR 1999-16020 19991208
JP 2002531129 T2 20020924 JP 2000-586916 19991208
US 6432916 B1 20020813 US 2000-556877 20000419
US 6565856 B1 20030520 US 2000-598419 20000620
US 6448234 B1 20020910 US 2000-620412 20000720
ZA 2001004414 A 20020829 ZA 2001-4414 20010529
NO 2001002812 A 20010802 NO 2001-2812 20010607
PRAI US 1998-208277 A2 19981208
US 1999-288594 A2 19990408
US 1999-410568 A 19991001
US 1999-426571 A 19991022
US 1999-454684 A2 19991203
WO 1999-US29012 W 19991208
US 2000-556877 A2 20000419
US 2000-598419 A2 20000620

AB Compds. and methods for the diagnosis and treatment of Chlamydial infection are disclosed. The compds. provided include polypeptides that contain at least one antigenic portion of a Chlamydia antigen and DNA sequences encoding such polypeptides. Pharmaceutical compns. and **vaccines** comprising such polypeptides or DNA sequences are also provided, together with antibodies directed against such polypeptides. Diagnostic kits contg. such polypeptides or DNA sequences and a suitable detection reagent may be used for the detection of Chlamydial infection in patients and in biol. samples.

RE.CNT 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 8 OF 55 EMBASE COPYRIGHT 2003 ELSEVIER INC. ALL RIGHTS RESERVED. on STN
AN 2002223684 EMBASE
TI Identification of **Chlamydia pneumoniae**-derived mouse CD8 epitopes.
AU Saren A.; Pascolo S.; Stevanovic S.; Dumrese T.; Puolakkainen M.; Sarvas M.; Rammensee H.-G.; Vuola J.M.
CS A. Saren, National Public Health Institute, Department of Vaccines, Mannerheimintie 166, 00300 Helsinki, Finland. anne.saren@ktl.fi
SO Infection and Immunity, (2002) 70/7 (3336-3343).
Refs: 32
ISSN: 0019-9567 CODEN: INFIBR
CY United States
DT Journal; Article
FS 004 Microbiology
026 Immunology, Serology and Transplantation
037 Drug Literature Index
LA English
SL English

AB **Chlamydia pneumoniae** is a common intracellular human pathogen that has been associated with several severe pathological conditions, including coronary heart disease and atherosclerosis. There is

L7 ANSWER 50 OF 54 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 3
AN 2000:347996 BIOSIS
DN PREV200000347996
TI Use of a mouse lung challenge model to identify antigens protective against **Chlamydia** pneumoniae lung infection.
AU **Murdin, Andrew D.** [Reprint author]; Dunn, Pamela; Sodoyer, Regis; **Wang, Joe**; Caterini, Judy; Brunham, Robert C.; Aujame, Luc; **Oomen, Ray**
CS Aventis Pasteur Canada, 1755 Steeles Ave. W., Toronto, ON, M2R 3T4, Canada
SO Journal of Infectious Diseases, (June, 2000) Vol. 181, No. Supplement 3, pp. S544-S551. print.
CODEN: JIDIAQ. ISSN: 0022-1899.
DT Article
LA English
ED Entered STN: 16 Aug 2000
Last Updated on STN: 7 Jan 2002
AB **Chlamydia** pneumoniae is emerging as a significant human pathogen. Infection causes a range of respiratory tract diseases and is associated with atherosclerosis. A **vaccine** could provide a considerable public health benefit; however, antigens able to elicit a protective immune response are largely unknown. A panel of open-reading frames (ORFs) from the C. pneumoniae genome sequence was screened for ability to elicit protective responses. Balb/c mice immunized with DNA containing the ORFs were tested for their ability to limit lung infection following an intranasal challenge. Immunization with DNA encoding the major outer membrane protein or an ADP/ATP translocase (Npt1Cp) of C. pneumoniae resulted in a reduced bacteria load in the lung after challenge. The identification of these antigens as protective is a significant step toward development of a C. pneumoniae **vaccine** and demonstrates the feasibility of using a DNA immunization strategy to screen the C. pneumoniae genome for other protective ORFs.

L7 ANSWER 51 OF 54 CAPLUS COPYRIGHT 2003 ACS on STN
AN 1998:180784 CAPLUS
DN 128:242889
TI **Chlamydial vaccines** and immunogenic compositions containing an outer membrane antigen and methods of preparation thereof
IN **Murdin, Andrew D.**; Underdown, Brian J.
PA Connaught Laboratories Ltd., Can.; Murdin, Andrew D.; Underdown, Brian J.
SO PCT Int. Appl., 50 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9810789	A1	19980319	WO 1997-CA656	19970911
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW				
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
US 6464979	B1	20021015	US 1996-713236	19960912
AU 9741958	A1	19980402	AU 1997-41958	19970911
EP 957935	A1	19991124	EP 1997-939910	19970911
EP 957935	B1	20030319		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
AT 234630	E	20030415	AT 1997-939910	19970911

no **vaccine** against C. pneumoniae infection, but CD8(+) T cells have been shown to be crucial for protection during experimental infection. However, the effector functions and epitope specificity of the protective CD8(+) T cell remain unknown. The aim of this study was to identify C. pneumoniae-derived mouse CD8 epitopes by using a recent epitope prediction method. Of four C. pneumoniae proteins (the major outer membrane protein, outer membrane protein 2, polymorphic outer membrane protein 5, and heat shock protein 60), 53 potential CD8(+) T-cell epitopes were predicted by H-2 class I binding algorithms. Nineteen of the 53 peptides were identified as CD8 epitopes by testing for induction of a cytotoxic response after immunization. To test whether the predicted epitopes are naturally processed and presented by C. pneumoniae-infected cells, we generated a panel of seven peptide-specific cytotoxic T lymphocyte lines that were subsequently tested for recognition of C. pneumoniae-infected target cells. By using this strategy, we were able to identify three C. pneumoniae CD8 epitopes that were, indeed, processed and presented on infected cells. Identification of these natural CD8 epitopes provides tools for characterization of CD8(+) T-cell function in vivo and generation of epitope-specific prevention strategies.

L12 ANSWER 9 OF 55 BIOTECHDS COPYRIGHT 2003 THOMSON DERWENT/ISI on STN
AN 2003-12061 BIOTECHDS
TI Intranasal administration of plasmid DNA-coated nanoparticles results in enhanced immune responses;
naked plasmid DNA expression in mouse for use in gene therapy and **vaccine**
AU CUI Z R; MUMPER R J
CS Univ Kentucky
LO Mumper RJ, Univ Kentucky, Coll Pharm, Ctr Pharmaceut Sci and Technol, Div Pharmaceut Sci, Lexington, KY 40536 USA
SO JOURNAL OF PHARMACY AND PHARMACOLOGY; (2002) 54, 9, 1195-1203 ISSN: 0022-3573
DT Journal
LA English
AB AUTHOR ABSTRACT - Intranasal immunization offers potential for the elicitation of effective mucosal and systemic immune responses. in this study, a previously reportednovel cationic nanoparticle engineered from a microemulsion precursor was further modified, optimized and applied intranasally to mice to explore itspotential as a plasmid DNA (pDNA) **vaccine** delivery system. To this end, more uniform nano-particles (around 100 nm) containing less cationic surfactant were developed. The pDNA-coated nanoparticles significantly enhanced thespecific serum IgG and IgA titres to an expressed model antigen, beta-galactosidase, by 18-28 and 25-30 fold, respectively, when compared with naked pDNA alone. An enhanced splenocyte proliferative response was also observedafter immunization with the pDNA-coated nanoparticles. it was concluded that these plasmid DNA-coated nanoparticles may have potential for immunization via the nasal route. (9 pages)

L12 ANSWER 10 OF 55 BIOTECHDS COPYRIGHT 2003 THOMSON DERWENT/ISI on STN
AN 2002-04516 BIOTECHDS
TI **Vaccine** useful for immunizing mammals against chlamydia infections, comprises vectors having sequence of ATP binding cassette gene, secretary locus open reading frame gene of chlamydia;
Chlamydia pneumoniae infection recombinant **vaccine** and **nucleic acid vaccine**
, vector expression in host cell useful for diagnosis
AU Murdin A D; Oomen R P; Wang J; Dunn P
PA Aventis-Pasteur
LO Toronto, Ontario, Canada.
PI WO 2001085972 15 Nov 2001
AI WO 2001-CA653 8 May 2001
PRAI US 2000-235398 26 Sep 2000; US 2000-202672 8 May 2000

be used to produce the proteins recombinantly in the construction of **vaccine** vectors as a **vaccine** agent and in the construction of an attenuated Chlamydia strain. The proteins are also useful as **vaccine** agents and for the preparation of medicaments for treating or preventing Chlamydia infection, e.g. community acquired pneumonia and upper respiratory tract infections. (51pp)

L12 ANSWER 44 OF 55 BIOTECHDS COPYRIGHT 2003 THOMSON DERWENT/ISI on STN
AN 2000-05941 BIOTECHDS
TI Novel **Chlamydia pneumoniae** antigens used for immunization and protection against Chlamydia sp. diseases; recombinant protein production via vector-mediated gene transfer and expression in host for bronchitis or pneumonia diagnosis, recombinant **vaccine** and **nucleic acid vaccine**
AU Murdin A D; Oomen R P
PA Connaught-Lab.
LO Toronto, Ontario, Canada.
PI WO 2000006739 10 Feb 2000
AI WO 1999-IB1328 27 Jul 1999
PRAI US 1999-360707 26 Jul 1999; US 1998-94198 27 Jul 1998
DT Patent
LA English
OS WPI: 2000-183129 [16]
AB An isolated polynucleotide (I), selected from a 1,169 bp DNA sequence (specified) or its functional fragments, a polynucleotide encoding a protein which is at least 75% homologous to a 363 amino acid protein sequence or its functional fragments, which corresponds to a **Chlamydia pneumoniae** antigen gene and a polynucleotide which hybridizes to the above DNA sequence, are new. Also claimed are: an expression DNA cassette which consists of (I) operably linked to a promoter; an expression vector containing the above DNA cassette; a host cell transformed with the vector; a method for producing a recombinant CPN100202 protein which consists of culturing the transformed host cells under conditions that allow the expression of the protein; a **vaccine** vector containing the DNA cassette; a composition containing the **vaccine** vector; a composition containing the above protein, an adjuvant and one or more known Chlamydia sp. antigens; a method for inducing an immune response in a mammal; a DNA probe/primer for detecting Chlamydia sp.; and antibodies specific for CPN100202. The above may be useful as recombinant and **nucleic acid vaccines** for e.g. pneumonia and bronchitis. (45pp)

L12 ANSWER 45 OF 55 EMBASE COPYRIGHT 2003 ELSEVIER INC. ALL RIGHTS RESERVED. on STN DUPLICATE 1
AN 2001005443 EMBASE
TI Immunity to **Chlamydia pneumoniae** induced by **vaccination** with DNA vectors expressing a cytoplasmic protein (Hsp60) or outer membrane proteins (MOMP and Omp2).
AU Penttila T.; Vuola J.M.; Puurula V.; Anttila M.; Sarvas M.; Rautonen N.; Makela P.H.; Puolakkainen M.
CS T. Penttila, Department of Virology, Haartman Institute, University of Helsinki, POB 21, FIN-00014 Helsinki, Finland. tuula.penttila@helsinki.fi
SO Vaccine, (8 Dec 2000) 19/9-10 (1256-1265).
Refs: 43
ISSN: 0264-410X CODEN: VACCDE
PUI S 0264-410X(00)00237-1
CY United Kingdom
DT Journal; Article
FS 026 Immunology, Serology and Transplantation
037 Drug Literature Index
LA English
SL English
AB Immune responses induced by intramuscular DNA immunization with

Chlamydia pneumoniae genes coding for the major outer membrane protein (MOMP), cysteine-rich outer membrane protein 2 (Omp2) or the heat shock protein 60 (Hsp60) were studied. BALB/c mice were **vaccinated** intramuscularly three times at 3-week intervals and challenged intranasally 2 weeks after the last injection. Immunization with pmomp or phsp60 showed 1.2-1.5 log reduction in the mean lung bacterial counts after the challenge. Specific antibodies were detected only in sera of the mice immunized with pomp2 and phsp60. Although immunization with pomp2 resulted in a strong serum antibody response against Omp2 protein, it failed to protect the mice. Immunization with any of the three **vaccines** did not reduce the severity of histologically assessed pneumonia, but resulted in significantly higher lymphoid reaction in the lung indicating immunological memory. .COPYRGT. 2000 Elsevier Science Ltd.

L12 ANSWER 46 OF 55 EMBASE on STN
AN 2000225593 EMBASE
TI Use of a mouse lung challenge model to identify antigens protective against **Chlamydia pneumoniae** lung infection.
AU Murdin A.D.; Dunn P.; Sodoyer R.; Wang J.; Caterini J.; Brunham R.C.; Aujame L.; Oomen R.
CS Dr. A.D. Murdin, Aventis Pasteur Canada, 1755 Steeles Ave. W., Toronto, Ont. M2R 3T4, Canada. andrew.murdin@aventis.com
SO Journal of Infectious Diseases, (2000) 181/6 SUPPL. 3 (S544-S551). Refs: 47
ISSN: 0022-1899 CODEN: JIDIAQ
CY United States
DT Journal; Conference Article
FS 004 Microbiology
026 Immunology, Serology and Transplantation
037 Drug Literature Index
LA English
SL English
AB **Chlamydia pneumoniae** is emerging as a significant human pathogen. Infection causes a range of respiratory tract diseases and is associated with atherosclerosis. A **vaccine** could provide a considerable public health benefit; however, antigens able to elicit a protective immune response are largely unknown. A panel of open-reading frames (ORFs) from the C. pneumoniae genome sequence was screened for ability to elicit protective responses. Balb/c mice immunized with DNA containing the ORFs were tested for their ability to limit lung infection following an intranasal challenge. Immunization with DNA encoding the major outer membrane protein or an ADP/ATP translocase (Npt1(Cp)) of C. pneumoniae resulted in a reduced bacteria load in the lung after challenge. The identification of these antigens as protective is a significant step toward development of a C. pneumoniae **vaccine** and demonstrates the feasibility of using a DNA immunization strategy to screen the C. pneumoniae genome for other protective ORFs.

L12 ANSWER 47 OF 55 BIOSIS on STN
DUPLICATE 2
AN 2000:347994 BIOSIS
DN PREV200000347994
TI The potential for **vaccine** development against chlamydial infection and disease.
AU Brunham, R. C. [Reprint author]; Zhang, D. J.; Yang, X.; McClarty, G. M.
CS Centre for Disease Control, University of British Columbia, 655 W. 12th Ave., Vancouver, BC, V5Z 4R4, Canada
SO Journal of Infectious Diseases, (June, 2000) Vol. 181, No. Supplement 3, pp. S538-S543. print.
CODEN: JIDIAQ. ISSN: 0022-1899.
DT Article

the presence of conformational epitopes. A family of 21 pmp genes has been found by DNA sequencing. In common, these genes have the capacity to encode the amino acid motif GGAI. Several of the genes have the capacity to encode outer membrane proteins of about 100 kDa. Thus, they are candidate genes to encode the protein(s) present in the 98-kDa protein band of the C. pneumoniae outer membrane complex. The production of recombinant GGAI proteins is described as is the use of polyclonal **antibodies** raised against the recombinant GGAI proteins to determine their expression in C. pneumoniae elementary bodies. At least three of the proteins, Omp4, 5, and 11, are expressed.

L20 ANSWER 95 OF 126 EMBASE COPYRIGHT 2003 ELSEVIER INC. ALL RIGHTS RESERVED. on STN
AN 2000225591 EMBASE
TI Potential relevance of **Chlamydia pneumoniae** surface proteins to an effective **vaccine**.
AU Christiansen G.; Pedersen A.-S.; Hjerno K.; Vandahl B.; Birkelund S.
CS Dr. G. Christiansen, Dept. of Med. Microbiol./Immunology, Bartholin Bldg., University of Aarhus, DK 8000 Aarhus C, Denmark. gunna@medmicro.au.dk
SO Journal of Infectious Diseases, (2000) 181/6 SUPPL. 3 (S528-S537). Refs: 30
ISSN: 0022-1899 CODEN: JIDIAQ
CY United States
DT Journal; Conference Article
FS 004 Microbiology
026 Immunology, Serology and Transplantation
LA English
SL English
AB The surface of **Chlamydia pneumoniae** is covered with proteins but their exact identification is not known probably because of the presence of conformational epitopes. A family of 21 pmp genes has been found by DNA sequencing. In common, these genes have the capacity to encode the amino acid motif GGAI. Several of the genes have the capacity to encode outer membrane proteins of about 100 kDa. Thus, they are candidate genes to encode the protein(s) present in the 98-kDa protein band of the C. pneumoniae outer membrane complex. The production of recombinant GGAI proteins is described as is the use of polyclonal **antibodies** raised against the recombinant GGAI proteins to determine their expression in C. pneumoniae elementary bodies. At least three of the proteins, Omp4, 5, and 11, are expressed.

L20 ANSWER 96 OF 126 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 50
AN 2000:230361 BIOSIS
DN PREV200000230361
TI Protective DNA immunization against **Chlamydia pneumoniae**
AU Svanholm, C.; Bandholtz, L.; Castanos-Velez, E.; Wigzell, H.; Rottenberg, M. E. [Reprint author]
CS Microbiology and Tumour Biology Center, Karolinska Institute, S-171 77, Stockholm, Sweden
SO Scandinavian Journal of Immunology, (April, 2000) Vol. 51, No. 4, pp. 345-353. print.
CODEN: SJIMAX. ISSN: 0300-9475.
DT Article
LA English
ED Entered STN: 7 Jun 2000
Last Updated on STN: 5 Jan 2002
AB We have investigated the efficacy of the DNA **vaccination** using the heat shock protein 60 (HSP-60) gene of C. pneumoniae, for protection of mice against infection with the bacteria. C57B1/6 mice had a 5-20-fold reduction of C. pneumoniae numbers in lungs when immunized intranasally (i.n.) with plasmids (p) encoding pHSP-60. The reduction of the bacterial

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9917741	A1	19990415	WO 1998-US20737	19981001
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	CA 2305709	AA	19990415	CA 1998-2305709	19981001
	AU 9895988	A1	19990427	AU 1998-95988	19981001
	AU 752426	B2	20020919		
	EP 1019028	A1	20000719	EP 1998-949723	19981001
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	BR 9813841	A	20001003	BR 1998-13841	19981001
	JP 2001518489	T2	20011016	JP 2000-514618	19981001
	NZ 503763	A	20030131	NZ 1998-503763	19981001
	ZA 9809012	A	19990412	ZA 1998-9012	19981002
PRAI	US 1997-942596	A	19971002		
	WO 1998-US20737	W	19981001		

AB A high-mol.-wt. (HMW) protein of Chlamydia, the amino acid sequence thereof, and **antibodies** that specifically bind the HMW protein are disclosed as well as the nucleic acid sequence encoding the same. The gene encoding HMW protein was cloned and sequenced from C. trachomatis strains L2, B, and F. The in vitro neutralization model shows that protective antiserum against HMW protein inhibits chalmydial infections of various tissue culture cell lines. **Vaccine** compns. comprising the HMW protein are effective in a mouse model of salpingitis and fertility. Thus, disclosed are prophylactic and therapeutic compns., comprising the HMW protein, a fragment thereof, or an **antibody** that specifically binds the HMW protein or a portion thereof, or the nucleotide sequence encoding the HMW protein or a fragment thereof, including **vaccines**.

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 100 OF 126 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 52
AN 2000:123421 BIOSIS
DN PREV200000123421
TI **Vaccination** against infections by **Chlamydia pneumoniae**.
AU Puolakkainen, Mirja [Reprint author]; Makela, P. Helena
CS Department of Virology, Haartman Institute, University of Helsinki, Helsinki, Finland
SO Comptes Rendus de l'Academie des Sciences Serie III Sciences de la Vie, (Nov., 1999) Vol. 322, No. 11, pp. 973-978. print.
CODEN: CRASEV. ISSN: 0764-4469.
DT Article
LA English
ED Entered STN: 5 Apr 2000
Last Updated on STN: 3 Jan 2002
AB **Chlamydia pneumoniae** is an intracellularly growing bacterium that causes respiratory infections and is strongly associated with atherosclerosis. **Antibodies** against C. pneumoniae are frequently encountered in the adult population, indicating past exposure to the micro-organism. Immunity to reinfection is, however, only partial and does not prevent development of sequelae. Infections caused by and associated with C. pneumoniae are a major cause of morbidity and mortality

world wide. Development of a **vaccine** capable of protecting against infections due to C. pneumoniae and their sequelae would prevent up to 10 % of community-acquired pneumonias in adults and add a new dimension to the prevention of atherosclerosis and coronary heart disease.

L20 ANSWER 101 OF 126 CABA COPYRIGHT 2003 CABI on STN
AN 2000:49945 CABA
DN 20002005683
TI Microbial aetiology of community-acquired pneumonia in hospitalised patients
AU Socan, M.; Marinic-Fiser, N.; Kraigher, A.; Kotnik, A.; Logar, M.
CS Department of Infectious Diseases, University Medical Centre, Japljeva 2, 1520 Ljubljana, Slovenia.
SO European Journal of Clinical Microbiology & Infectious Diseases, (1999) Vol. 18, No. 11, pp. 777-782. 31 ref.
ISSN: 0934-9723
DT Journal
LA English
AB Blood and sputum samples of 211 patients (106 male and 105 female, aged >15 years) from Slovenia, with community-acquired pneumonia (CAP), were collected for culture between April 1996 and March 1997. Paired sera were available from 152 patients. Throat swabs were obtained for isolation of viruses and for detection of antigens of **Chlamydia pneumoniae**, influenza viruses A and B, respiratory syncytial virus and parainfluenza virus. **Antibodies** against Legionella spp., Mycoplasma pneumoniae, **Chlamydia pneumoniae**, Chlamydia psittaci, Coxiella burnetii, influenza viruses A and B, respiratory syncytial virus, adenovirus and parainfluenza virus were tested in serum samples. Blood culture was positive in 23 (10.9%) patients, Streptococcus pneumoniae being the bacterium isolated most frequently. A 4-fold or greater rise or fall in the C. pneumoniae IgG and/or IgM **antibody** titre was found in 20 (9.5%) patients and a high **antibody** titre (more than or equal to 1:512) in the first and/or the second serum sample in 18 (18.5%) patients. **Antibodies** confirming acute M. pneumoniae infection were found in 12 (5.7%) patients, Legionella spp. in 6 (2.8%), C. psittaci in 2 and C. burnetii in 1. Three patients had pulmonary tuberculosis. Only 2 patients had a virus present in the throat swab (1 with adenovirus and 1 with echovirus) and in 9 patients, viral antigen was detected. Acute viral infection was confirmed in 51 (24.1%) patients. Bacterial pneumonia was diagnosed in 84 (39.8%) patients, 23 of whom had concurrent viral infection. Acute viral pneumonia without any other identified pathogen was diagnosed in 28 patients. S. pneumoniae and C. pneumoniae were the most frequently identified microorganisms. It is concluded that the rate of pneumococcal pneumonia was low as a consequence of using blood culture as the sole microbiological test to prove typical bacterial pneumonia. The incidence of respiratory tract infections, including CAP, could probably be lowered to some degree by a more widespread use of pneumococcal and influenza **vaccine**.

L20 ANSWER 102 OF 126 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 53
AN 1999:452071 BIOSIS
DN PREV199900452071
TI Etiology of acute lower respiratory tract infection in central Australian Aboriginal children.
AU Torzillo, Paul [Reprint author]; Dixon, Jeannette; Manning, Kathy; Hutton, Sue; Gratten, Mike; Hueston, Linda; Leinonen, Maija; Morey, Fran; Forsythe, Simon; Num, Richard; Erlich, John; Asche, Val; Cunningham, Anthony; Riley, Ian
CS Queensland Institute of Medical Research, Brisbane, Australia
SO Pediatric Infectious Disease Journal, (Aug., 1999) Vol. 18, No. 8, pp. 714-721. print.
ISSN: 0891-3668.

AN 1999:155402 BIOSIS
DN PREV199900155402
TI Single channel analysis of recombinant major outer membrane protein porins from Chlamydia psittaci and **Chlamydia pneumoniae**.
AU Wyllie, S.; Longbottom, D. [Reprint author]; Herring, A. J.; Ashley, R. H.
CS Moredun Res. Inst., International Res. Centre, Pentlands Science Park, Penicuik, Midlothian EH26 OPZ, UK
SO FEBS Letters, (Feb. 19, 1999) Vol. 445, No. 1, pp. 192-196. print.
CODEN: FEBLAL. ISSN: 0014-5793.
DT Article
LA English
ED Entered STN: 16 Apr 1999
Last Updated on STN: 16 Apr 1999
AB We recently demonstrated that the major outer membrane protein of Chlamydia psittaci, the primary **vaccine** candidate for combating chlamydial infections, functions as a porin-like ion channel. In this study, we have cloned, expressed and functionally reconstituted recombinant major outer membrane proteins from C. psittaci and **Chlamydia pneumoniae** and analysed them at the single channel level. Both form porin-like ion channels that are functionally similar to those formed by native C. psittaci major outer membrane protein. Also, like the native channels, recombinant C. psittaci channels are modified by a native major outer membrane protein-specific monoclonal **antibody**. This is the first time that native function has been demonstrated for recombinant chlamydial major outer membrane proteins. Future bilayer reconstitution will provide a strategy for detailed structure/function studies of this new subclass of bacterial porins and the work also has important implications for successful protein refolding and the development of improved subunit **vaccines**.

L20 ANSWER 106 OF 126 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
AN 1999:340747 BIOSIS
DN PREV199900340747
TI Microbiological and serological diagnosis of pertussis.
AU Hallander, Hans O. [Reprint author]
CS Swedish Institute for Infectious Disease Control, S-171 82, Solna, Sweden
SO Clinical Infectious Diseases, (June, 1999) Vol. 28, No. SUPPL. 2, pp. S99-S106. print.
CODEN: CIDIEL. ISSN: 1058-4838.
DT Article
LA English
ED Entered STN: 24 Aug 1999
Last Updated on STN: 24 Aug 1999
AB Swedish **vaccine** trials have been used to examine sensitivity and specificity of diagnostic procedures for Bordetella pertussis infection. The proportions of cases diagnosed by culture and serology were 55% and 45%, respectively, when both methods were optimized. The culture method included nasopharyngeal aspiration, direct inoculation on plates, enrichment, and repeated collection of samples. An enzyme-linked immunosorbent assay for IgG **antibodies** to pertussis toxin (PT) and to filamentous hemagglutinin, with paired sera, was used for serology. Preexposure sera other than the acute serum increased the sensitivity of serology by 10%. A serology quality-assurance program to control imprecision and allow comparability over time and between laboratories is described. The direct fluorescent **antibody** technique had a sensitivity of 38% and a specificity of 99.6% in comparison with culture. A nested polymerase chain reaction (PCR) with the PT promoter region as target was 95% sensitive in comparison with culture if a cation-exchange resin was used to reduce inhibition. PCR enabled us to identify 83 positive samples in addition to 215 culture-positive ones-an increase of 38%-all with other indicators of pertussis infection.

L20 ANSWER 107 OF 126 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN

DUPLICATE 55
AN 1999:252556 BIOSIS
DN PREV199900252556
TI Is cardiovascular disease preventable by **vaccination**?.
AU Makela, P. Helena [Reprint author]
CS National Public Health Institute, Mannerheimintie 166, FIN-00300, Helsinki, Finland
SO Annals of Medicine, (Feb., 1999) Vol. 31, No. 1, pp. 61-65. print.
CODEN: ANMDEU. ISSN: 0785-3890.
DT Article
LA English
ED Entered STN: 2 Jul 1999
Last Updated on STN: 2 Jul 1999
AB The possibility of using **vaccination** as a tool in the prevention of atherosclerotic disease was opened by the findings that infection with **Chlamydia pneumoniae** was an independent risk factor for cardiovascular disease, including acute myocardial infarction. Since this finding, data have accumulated confirming the initial epidemiological association and demonstrating the presence of C. pneumoniae and/or its components in vascular lesions. Recent intervention trials with antimicrobial drugs have furthermore suggested a pathogenetic relationship. The role of C. pneumoniae needs, however, to be further confirmed before deciding on the use of a possible **vaccine**. At present, a **vaccine** for C. pneumoniae is not available but development is ongoing. The task is far from easy: the intracellular bacteria cannot be reached by **antibodies**, and the stimulation of CD8+ T cells required for protection is difficult with a nonliving **vaccine**. On the other hand, recent advances in biotechnology, including the sequence of the full genome of C. pneumoniae, provide unique tools for the work. With enough interest in the development of a C. pneumoniae **vaccine** the first clinical trials could be expected in several years' time. They will, however, have to be extensive in order to ascertain the safety of such a new type of **vaccine** intended for use in populations in which many have already been infected with the bacteria and many are chronic carriers. Who should be **vaccinated** is a question to be considered at that point.

L20 ANSWER 108 OF 126 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN DUPLICATE 56
AN 1999-105610 [09] WPIDS
DNC C1999-031445
TI Species-specific test for identifying mammals infected with **Chlamydia pneumoniae** - comprises detecting **antibodies** specific for outer membrane proteins of C. pneumoniae or nucleic acids encoding these proteins.
DC B04 D16
IN BIRKELUND, S; CHRISTIANSEN, G; KNUDSEN, K; MYGIND, P; PEDERSEN, A H; HEBSGAARD PEDERSEN, A; MADSEN, A
PA (BIRK-I) BIRKELUND S; (CHRI-I) CHRISTIANSEN G; (LOKE-N) LOKE DIAGNOSTICS APS
CYC 83
PI WO 9858953 A2 19981230 (199909)* EN 115p
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW
W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM GW HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZW
AU 9880119 A 19990104 (199921)
EP 1007685 A2 20000614 (200033) EN
R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE
BR 9810288 A 20000919 (200050)
CN 1261403 A 20000726 (200057)

suggest that the VDs of the MOMP of C. pneumoniae are surface exposed but do not elicit neutralizing **antibodies** when linear peptides representing them are used as the immunogen.

L20 ANSWER 117 OF 126 CAPLUS COPYRIGHT 2003 ACS on STN
AN 1995:465749 CAPLUS
DN 122:212109
TI Chlamydia antigen, process for its manufacture and its use.
IN Brade, Helmut
PA Germany
SO Eur. Pat. Appl., 11 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI EP 641568	A1	19950308	EP 1993-114276	19930906

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE
PRAI EP 1993-114276 19930906
AB Disclosed is a ladder-like banding pattern antigen (LLBPA) characterized in that it is resistant against proteolytic digestion, is resistant to heat (70.degree.C, 1 h) at neutral pH is extd. by phenol-water extn. preferably into the water-phase, and gives rise to a regular ladder-like banding pattern upon sodium dodecylsulfate polyacrylamide-gel electrophoresis (SDS-PAGE) as detected by silver-staining the gel or by blotting to nitrocellulose followed by staining with labeled **antibodies**, and induces **antibodies** upon immunization or infection. The antigen is derived from cultures of Chlamydia, Nesseria, Bacteroides, Acinetobacter, Haemophilus and Bordetella in embryonated eggs, tissue culture cells or other artificial media. The antigen is used for diagnosis, prevention, and treatment of microorganism infections. In example, LLBPA was purified from Chlamydia psittaci cultured in embryonated eggs, and L929 cells. Antisera and monoclonal **antibodies** against the LLBPA were raised.

L20 ANSWER 118 OF 126 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
AN 1996:76969 BIOSIS
DN PREV199698649104
TI The immunobiology and immunopathology of chlamydial infections.
AU Ward, Michael E.
CS Mol. Microbiol. Group, Mailpoint 814, Southampton Univ. Med. Sch., Southampton General Hosp., SO16 6YD, UK
SO APMIS, (1995) Vol. 103, No. 11, pp. 769-796.
CODEN: APMSEL. ISSN: 0903-4641.
DT Article
General Review; (Literature Review)
LA English
ED Entered STN: 27 Feb 1996
Last Updated on STN: 27 Feb 1996
AB Chlamydiae are obligate intracellular bacterial pathogens of eukaryotic cells responsible for a wide variety of important human and animal infections. In humans, chlamydial infections are generally localised to superficial epithelial or mucosal surfaces, are frequently asymptomatic and may persist for long periods of time if untreated, inducing little protective immunity. Nevertheless, neutralising **antibodies** of limited efficacy are produced against the main chlamydial outer envelope protein, while gamma interferon (IFN-gamma) is chlamydiastatic and paradoxically may play a role both in chlamydial persistence and in protective immunity. Delayed hypersensitivity responses to chlamydiae caused by repeated or persistent infection are thought to be important in the development of the severe scarring sequelae characteristic of cicatricial trachoma and of chronic salpingitis. Chlamydial heat shock

proteins bearing close homology with their human equivalents may be major targets for immunopathological responses and their expression is upregulated in IFN-gamma induced persistent infection. C. pneumoniae, a common cause of acute respiratory infection in humans, may persist in coronary arteries and is strongly implicated as a risk factor in atherosclerosis and in acute myocardial infarction. This paper reviews the immunology and immunopathology of chlamydial infections in the context of the unique biology of this fascinating but challenging group of organisms.

L20 ANSWER 119 OF 126 CAPLUS COPYRIGHT 2003 ACS on STN
AN 1995:789071 CAPLUS
DN 123:196261
TI Further characterization of **Chlamydia pneumoniae** specific monoclonal **antibodies**
AU Puolakkainen, Mirja; Parker, Julia; Kuo, Cho-Chou; Grayston, J. Thomas; Campbell, Lee Ann
CS Dep. Pathobiology, Univ. Washington, Seattle, WA, 98195, USA
SO Microbiology and Immunology (1995), 39(8), 551-4
CODEN: MIIMDV; ISSN: 0385-5600
PB Center for Academic Publications Japan
DT Journal
LA English
AB Studies using monoclonal **antibodies** have demonstrated species-specific reactivities with C. pneumoniae. Here, further characterization of C. pneumoniae specific monoclonal **antibodies** TT-205 and RR-402 and description of C. pneumoniae specific **antibodies** prepd. against other isolates are presented. TT-205 and RR-402 were shown to neutralize infectivity. Neutralization in cell culture was specific and enhanced by complement. Attempts to characterize the reactive antigen by immunoblotting, immunoaffinity chromatog. and radioimmunopptn. were unsuccessful, probably due to difficulties in solubilizing the immunoreactive epitope without denaturing it. Recognition of the determinant by the monoclonal **antibodies** is labile to phys. and chem. treatments suggesting that the reactive epitope is conformational.

L20 ANSWER 120 OF 126 MEDLINE on STN DUPLICATE 61
AN 95207268 MEDLINE
DN 95207268 PubMed ID: 7899384
TI Clinical aspects of **Chlamydia pneumoniae** infection.
AU Cook P J; Honeybourne D
CS Department of Thoracic Medicine, City Hospital NHS trust, Birmingham, United Kingdom.
SO PRESSE MEDICALE, (1995 Feb 4) 24 (5) 278-82. Ref: 33
Journal code: 8302490. ISSN: 0755-4982.
CY France
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LA English
FS Priority Journals; AIDS
EM 199504
ED Entered STN: 19950504
Last Updated on STN: 19950504
Entered Medline: 19950425
AB This recently recognised member of the genus Chlamydia is one of the most widespread pathogens of man, though up to 90% of infected people have few or no symptoms. Several studies have estimated the population prevalence of **antibodies** to C. pneumoniae at 40-55% in the northern hemisphere, and over 60% in under-developed countries. The incidence of infections follows a cyclical pattern, with peaks at regular intervals of 2-10 years, but no apparent seasonal periodicity. Nosocomial transmission

may be mediated by environmental surfaces as well as aerosols, and immunosuppression, for example by the human immunodeficiency virus, predisposes to infection. **Chlamydia pneumoniae** causes predominantly atypical pneumonia, often severe in adults, especially the elderly; including 5-10% of community-acquired pneumonia in Scandinavian countries. Serological evidence indicates associations with asthma, bronchitis, exacerbations of chronic airflow obstruction, otitis media and bronchiolitis. Several studies, using both serological and morbid anatomical techniques, also indicate associations with vascular atheroma and ischaemic heart disease, and with acute myocardial infarction. Chronic, latent and recurrent infections have been documented, and it is postulated that, like chronic or recurrent C. trachomatis infections, these may produce disease as a consequence of the host's immunological hypersensitivity. Several techniques are available for serological diagnosis: the technique of choice is micro-immunofluorescence, using fixed whole elementary or reticulate bodies as antigen, but **antibody** responses are highly variable. Traditional alternatives, antigen detection (by direct immunofluorescence or enzyme immunoassay) and cell culture, have major disadvantages. Polymerase chain reactions have not yet been widely applied to the clinical setting. tetracycline antibiotics, erythromycin and quinolones are not very efficacious in the treatment of C. pneumoniae infection. The azalide antibiotic, azithromycin, and the macrolide, clarithromycin, are active in vitro against C. pneumoniae, and may become treatments of choice. The development of anti-chlamydial **vaccines** remains an important research goal.

L20 ANSWER 121 OF 126 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 62
AN 1994:212282 BIOSIS
DN PREV199497225282
TI Infectious diseases.
AU Welsby, P. D.
CS Dep. Infect. Dis., City Hosp., 51 Greenbank Dr., Edinburgh EH10 5SB, UK
SO Postgraduate Medical Journal, (1994) Vol. 70, No. 820, pp. 74-85.
CODEN: PGMJAO. ISSN: 0032-5473.
DT Article
General Review; (Literature Review)
LA English
ED Entered STN: 10 May 1994
Last Updated on STN: 11 May 1994

L20 ANSWER 122 OF 126 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 63
AN 1993:252152 BIOSIS
DN PREV199395131327
TI Characterization of a neutralizing monoclonal **antibody** directed at variable domain I of the major outer membrane protein of Chlamydia trachomatis C-complex serovars.
AU Qu, Zhenhai; Cheng, Xun; De La Maza, Luis M.; Peterson, Ellena M. [Reprint author]
CS Dep. Pathol., Medical Sci. Building I, Room D440, University California, Irvine, Irvine, CA 92717, USA
SO Infection and Immunity, (1993) Vol. 61, No. 4, pp. 1365-1370.
CODEN: INFIBR. ISSN: 0019-9567.
DT Article
LA English
ED Entered STN: 21 May 1993
Last Updated on STN: 21 May 1993
AB A monoclonal **antibody** (MAb), C10, that neutralized in vitro the infectivity of serovars C, I, J, and L3 (members of the C and C-related complexes) of Chlamydia trachomatis was identified. Of the 15 major serovars and the mouse pneumonitis strain of C. trachomatis, Chlamydia

DT Patent
LA English
FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6235290	B1	20010522	US 1997-893381	19970711
	US 6344202	B1	20020205	US 1998-55765	19980407
	US 2002142001	A1	20021003	US 2002-36507	20020107
PRAI	US 1996-21607P	P	19960712		
	US 1997-893381	A2	19970711		
	US 1998-55765	A3	19980407		

AB The author discloses the application of DNA immunization to generate a protective immune response in a host, including humans, directed to a major outer membrane protein of a strain of Chlamydia. Immunization is effected using a plasmid vector expressing a nucleotide sequence encoding MOMP or a MOMP fragment and driven by the cytomegalovirus promoter.

RE.CNT 147 THERE ARE 147 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 28 OF 55 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
AN 2002:565960 BIOSIS
DN PREV200200565960
TI **DNA-vaccines** for **Chlamydia pneumoniae** infection in a rabbit model.
AU Fong, I. W. [Reprint author]; Chiu, B. [Reprint author]; Viira, E.; Jang, D.; Coombes, B.; Mahony, J.; Caterini, J.; Dunn, P.; Murdin, A.
CS University of Toronto, St. Michael's Hospital, Toronto, ON, Canada
SO Abstracts of the Interscience Conference on Antimicrobial Agents and Chemotherapy, (2001) Vol. 41, pp. 273. print.
Meeting Info.: 41st Annual Meeting of the Interscience Conference on Antimicrobial Agents and Chemotherapy. Chicago, Illinois, USA. September 22-25, 2001.
DT Article
Conference; (Meeting)
LA English
ED Entered STN: 7 Nov 2002
Last Updated on STN: 7 Nov 2002
AB Four DNA immunization constructs encoding selected C. pneumoniae antigens were tested for protective efficacy in the rabbit pneumonia model. The immunization constructs were pCAMOMP, encoding the major outer membrane protein (MOMP); pCAI555, encoding the 76kDa antigen homolog; pCACRMP60, encoding the 60kDa cystein rich membrane protein, and pCAI764, encoding the ATP/ADP translocase (Nptlcp). A control group was immunized with the empty DNA immunization vector pCA/MyCHIS. Each group contained 20 rabbits. Animals were immunized with 200 mug DNA intramuscularly and 200 mug DNA intranasally three times at two weeks intervals, then challenged with about 107 IFU of C. pn. Lungs were harvested seven days post challenge and assessed for severity of inflammation by a standardized score, and for antigen burden by immunohistochemical staining of lung sections for C. pn (foci of infection). In a pilot study bacterial burden by culture and quantitative PCR were found to be insensitive due to lung tissue inhibitors. The main inflammatory-histology score per lung for the control (pCA/MyCHIS) group was 11.75+-SD 4.35, vs 8.2+-4.37, for pCAMOMP (2 tailed t-test, p=0.011), 8.6+-2.93 for pCACRMP60 (p=0.025), 7.68+-2.81 for pCAI764 (p=0.001), and 9.30+-1.98 for pCAI555 (P=0.043). C. pn antigen was detected in a mean of 4.8+-1.96 foci per lung section from the pCA/MyCHIS group vs 2.95+-1.82 in the pCAMOMP group (p=0.008), 2.25+-1.29 in the pCACRMP60 group (p=0.002), 2.42+-2.09 in the pCAI764 gp (p=0.007) and 3.05+-2.48 in the pCAI555 gp (p=0.030). Thus, immunization with DNA constructs is capable of reducing pulmonary inflammation by 21% to 35% and bacterial antigen by 37% to 53% in C. pn infection in the rabbit model.

L12 ANSWER 29 OF 55 BIOTECHDS COPYRIGHT 2003 THOMSON DERWENT/ISI on STN